

THE MAGAZINE OF
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Science Fiction

JANUARY

40¢

Progress

a novelet by

POUL ANDERSON

Christmas Treason

a novelet by

JAMES WHITE

JAY WILLIAMS

ISAAC ASIMOV



Fantasy and Science Fiction

JANUARY Including Venture Science Fiction

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From North Ireland, a tale of a few especially talented children who recognize that Santa Claus is going to have a large logistical problem getting all those toys delivered, and, unusually enough, decide to do something direct to make sure they don't miss their share. . . .

CHRISTMAS TREASON

by James White

RICHARD SAT ON THE WOOLLY rug beside his brother's cot and watched the gang arrive one by one.

Liam came first wearing a thick sweater over pajamas too tight for him—his parents didn't have central heating. Then Mub, whose folks did not need it, in a nightie. When Greg arrived he fell over a truck belonging to Buster, because he was coming from the daytime and the moonlight coming into the room was too dim for him to see properly. The noise he made did not disturb the sleeping grown-ups, but Buster got excited and started rattling the bars of his cot and had to be shushed. Loo arrived last, with one of her long, funny dresses on, and stood blinking for a while, then sat on the side of Richard's bed with the others.

Now the meeting could begin. For some reason Richard felt

worried even though the Investigation was going fine, and he hoped this was just a sign that he was growing up. His Daddy and the other big people worried nearly all the time. Richard was six.

"Before hearing your reports," he began formally, "we will have the Minutes of the last—"

"Do we *hafta* . . . ?" whispered Liam angrily. Beside him Greg said a lot of nonsense words, louder than a whisper, which meant the same thing. Mub, Loo and his three-year-old brother merely radiated impatience.

"Quiet!" Richard whispered, then went on silently, "There has got to be Minutes, that book of my Daddy's says so. And talk without making a noise, I can hear you just as well. . . ."

That was his only talent, Richard thought enviously. Compared with the things the others could do it wasn't much. He wasn't able to

go to Loo's place, with its funny shed that had no sides and just a turned up roof, or play pirates on the boat Liam's Daddy had given him. There was a big hole in the boat and the engine had been taken out, but there was rope and nets and bits of iron in it, and sometimes the waves came so close it seemed to be floating. Some of the gang were frightened when the big waves turned white and rushed at them along the sand, but *he* wouldn't have been scared if he had been able to go there. Nor had he been to Mub's place, which was noisy and crowded and not very nice, or climbed the trees beside Greg's farm.

Richard couldn't go *anywhere* unless a grown-up took him in a train or a car or something. While if the others wanted to go somewhere they just went—even Buster could do it now. All he could do was listen and watch through their minds when they were playing and, if one of them wanted to say something complicated to the others, he would take what they were thinking and repeat it so everybody could hear it. And it was only his friends' minds he could get into—if only he could see what *Daddy* was thinking!

He was the oldest and the leader of the gang, but by itself that wasn't much fun. . . .

"I want my train set!" Greg broke in impatiently. A bright but indistinct picture of the promised

model railway filled Richard's mind, to be overlaid rapidly by pictures of Mub's dolly, Loo's blackboard, Liam's cowboy suit and Buster's machine-gun. His head felt like bursting.

"Stop thinking so loud!" Richard ordered sharply. "You'll get them, you'll all get them. We were promised."

"I know, but . . ." began Greg.

". . . How?" ended the others, in unison.

"That's what the Investigation is for, to find out," Richard replied crossly. "And we'll never find out if you keep rushing things. Quiet, gang, and listen!"

The room was already silent and then even the thinking noises died down. Richard began to speak in a whisper—he had found that talking while he was thinking kept his mind from wandering onto something else. And besides, he had learned some new grown-up words and wanted to impress the gang with them.

He said, "Two weeks ago Daddy asked Buster and me what we wanted for Christmas and told us about Santa. Santa Claus will bring you anything you want. Or any two things, or even three things, within reason, my Daddy says. Buster doesn't remember last Christmas, but the rest of us do and that's the way it happens. You hang up your stocking and in the morning there's sweets and apples

and things in it, and the *big* stuff you asked for is on the bed. But the grown-ups don't seem to know for sure how they got there . . ."

"Sleigh and reindeer," Greg whispered excitedly.

Richard shook his head. "None of the grown-ups can say how exactly it happens, they just tell us that Santa will come all right, that we'll get our toys in time and not to worry about it. But we can't help worrying about it. That's why we're having an Investigation to find out what really happens.

"We can't see how one man, even when he has a sleigh and magic reindeer that fly through the air, can bring everybody their toys all in one night . . ." Richard took a deep breath and got ready to use his new, grown-up words. "Delivering all that stuff during the course of a single night is a logistical impossibility."

Buster, Mub and Greg looked impressed. Loo thought primly, "Richard is showing off," and Liam said, "I think he's got a jet."

Feeling annoyed at the mixed reception to his big words, Richard was getting ready to whisper "Yah, Slanty-Eyes!" at Loo when he thought better of it and said instead, "Jets make a noise and we'd remember if we heard one last Christmas. But what we're supposed to do in an Investigation is get the facts and then find the answer—" he glared at Loo—"by a process of deductive reasoning."

Loo didn't say or think a word.

"All right then," Richard went on briskly, "this is what we know . . ."

His name was Santa Claus. Description: a man, big even for a grown-up, fresh complexion, blue eyes, white hair and beard. He dressed in a red cap, coat and trousers, all trimmed with white fur, also black shiny belt and knee-boots. Careful questioning of grown-ups showed that they were all in agreement about his appearance, although none of them had admitted to actually seeing him. Liam's Daddy had been questioned closely on this point and had said that he knew because Liam's Grandad had told *him*. It was also generally agreed that he lived somewhere at the North Pole in a secret cavern under the ice. The cavern was said to contain his toy workshops and storage warehouses.

They knew quite a lot about Santa. The major gap in their knowledge was his methods of distribution. On Christmas Eve, did he have to shoot back and forwards to the North Pole when he needed his sleigh refilled? If so it was a very chancy way of doing things and the gang had good cause to be worried. They didn't want any hitches on Christmas Eve, like toys coming late or getting mixed up. If anything they wanted them to come early.

Two weeks ago Richard had seen his mother packing some of

his old toys in a box. She had told him that they were going to the orphans because Santa never came to orphans.

The gang had to be *sure* everything would be all right. Imagine wakening on Christmas morning to find you were an *orphan*!

" . . . We can't get any more information at this end," Richard continued, "so we have to find the secret cavern and then see how he sends the stuff out. That was your last assignment, gang, and I'll take your reports now.

"You first, Mub."

Mub shook her head, she had nothing to report. But there was a background picture of her Daddy's face looking angry and shiny and sort of loose, and a smack from her Daddy's large, pink-palmed hand which had hurt her dignity much more than her bottom. Sometimes her Daddy would play with her for hours and she could ask him questions all the time, but other times he would come into the house talking funny and bumping into things the way Buster had done when he was just learning to walk, and then he would smack her if she asked questions all the time. Mub didn't know what to make of her Daddy sometimes.

Still without a word she floated up from the bed and drifted to the window. She began staring out at the cold, moonlit desert and the distant buildings where Richard's Daddy worked.

"Loo?" said Richard.

She had nothing to report either.

"Liam."

"I'll wait to last," said Liam smugly. It was plain that he knew something important, but he was thinking about sea-gulls to stop Richard from seeing what it was.

"All right, Greg then."

"I found where some of the toys are stored," Greg began. He went on to describe a trip with his mother and father into town to places called shops, and two of them had been full of toys. Then when he was home again his father gave him a beating and sent him to bed without his supper . . .

"O-o-oh," said Loo and Mub sympathetically.

This was because, Greg explained, he had seen a dinky little tractor with rubber treads on it that could climb over piles of books and things. When he got home he thought about it a lot, and then thought that he would try reaching for it the way they all did when they were somewhere and had left things they wanted to play with somewhere else. His Daddy had found him playing with it and smacked him, four times with his pants down, and told him it was wrong to take things that didn't belong to him and that the tractor was going right back to the shop.

But the beating had only hurt him for a short time and he was

nearly asleep when his mother came and gave him a hug and three big chocolates with cream in the middle. He had just finished eating them when his father brought in some more . . .

"O-h-h," said Loo and Mub, enviously.

"Feeties for *me*?" asked Buster, aloud. When excited he was apt to slip back into baby talk. Greg whispered "Night"—a nonsense word he used when he was thinking "No"—and added silently, "I ate them all."

"Getting back to the Investigation," Richard said firmly, "Dad took Buster and me to a shop the day before yesterday. I've been to town before but this time I was able to ask questions, and this is the way they work. Everybody doesn't always know exactly what they want for Christmas, so the stores are meant to show what toys Santa has in stock so they'll know what to ask for. But the toys in the shops can't be touched until Christmas, just like the ones at the North Pole. Daddy said so, and when we were talking to Santa he said the same thing . . ."

"*Santa!!!*"

A little awkwardly Richard went on, "Yes, Buster and I spoke to Santa. We . . . I asked him about his sleigh and reindeer, and then about what seemed to us to be a logistically insoluble problem of supply and distribution. When we were asking him he kept look-

ing at Daddy and Daddy kept looking up in the air, and that was when we saw his beard was held on with elastic.

"When we told him about this," Richard continued, "he said we were very bright youngsters and he had to admit that he was only one of Santa's deputies in disguise, sent to say Merry Christmas to all the boys and girls because Santa himself was so rushed with toy-making. He said that Santa didn't even tell *him* how he worked the trick, it was a Top Secret, but he did know that Santa had lots of computers and things and that the old boy believed in keeping right up to date science-wise. So we didn't have to worry about our toys coming, all that would be taken care of, he said.

"He was a very nice man," Richard concluded, "and didn't mind when we spotted his disguise and asked all the questions. He even gave us a couple of small presents on account."

As he finished Richard couldn't help wondering if that deputy had told everything he knew—he had looked very uncomfortable during some of the questions. Richard thought that it was a great pity that he couldn't listen to what everybody was thinking instead of just the kids in his gang. If only they knew where that secret cavern was.

"I know," said Liam suddenly. "I found it."

Everybody was asking questions at once then, and they were talking instead of just thinking. Where was it and had he seen Santa and was my train-set there and what were the toys like . . . ? In his mind Richard thundered, "Quiet! You'll wake my Daddy! And I'll ask the questions." To Liam he said, "That's great! How did you find it?"

One of Liam's abilities—one shared by Greg and Buster, and to a lesser degree by the girls—was of thinking about a place he would like to be and then going there. Or to be more precise, going to one of the places that were most like the place he wanted to go. He did not think of where so much as what he wanted—a matter of environment rather than geography. He would decide whether the place should have night, day, rain, sunshine, snow, trees, grass or sand and then think about the fine details. When his mental picture was complete he would go there, or they all—with the exception of Richard—would go there. Liam and Greg had found lots of lovely places in this way, which the gang used when they grew tired of playing in each other's backyards, because once they went to a place they always knew how to go back to it.

This time Liam had been trying for ice caverns with toys and reindeer stalls in them and had got nowhere at all. Apparently no

such place existed. Then he started asking himself what would a place look like if it had to make and store things, and maybe had to send them out to people fast. The answer was machinery. It mightn't be as noisy or dirty as the factory his Daddy had taken him to in Derry last summer, but there would have to be machinery.

But there might not be toys—they might not have been made or arrived yet. And if, as Richard had suggested, reindeer and sleighs were no longer in use, then they were out of the picture as well. And the ice cavern, now, that would be a cold place for Santa to work and if he turned on a heater the walls would melt, so the cavern might not be made of ice. What he was left with was a large underground factory or storehouse either at or somewhere near the North Pole.

It wasn't a very good description of the place he was looking for, but he found it.

In Liam's mind was the memory of a vast, echoing corridor so big it looked like a street. It was clean and brightly lit and empty. There was a sort of crane running along the roof with grabs hanging down, a bit like the ones he had seen lifting coal at the docks only these were painted red and yellow, and on both sides of the corridor stood a line of tall, splendid, unmistakable shapes. Rockets.

Rockets, thought Richard excit-

edly: *that was the answer, all right!* Rockets were faster than anything, although he didn't quite see how the toys would be delivered. Still, they would find that out easily now that they knew where the secret cavern was.

"Did you look inside them for toys?" Greg broke in, just ahead of the others asking the same question.

Liam had. Most of the rockets were filled with machinery and the nose had sort of sparkly stuff in it. All the ones he had looked at were the same and he had grown tired of floating about among the noses of the rockets and gone exploring instead. At the other end of the corridor there was a big notice with funny writing on it. He was standing in front of it when two-grown-ups with guns started running at him and yelling nonsense words. He got scared and left.

When Liam finished the girls began congratulating him and the hole in the chest of his sweater grew bigger. Then Greg tried to cut him down to size again by stating, "They weren't nonsense words. What the guards yelled at you, I mean. If you could remember better how they sounded I could tell you what they said . . ."

Just when things were getting exciting, Richard thought impatiently, another argument was going to start about what were nonsense words and what weren't. Buster, Liam and himself could

make themselves understood to each other whether they were speaking or thinking, but when any of the others spoke aloud it was just nonsense. And they said the same thing about words Richard, Liam and Buster spoke aloud. But the funny thing was that Loo, Mub and Greg couldn't understand what each other said, either.

Richard had an idea that this was because they lived in different places, like in the pictures he had studied in his Daddy's National Geographic magazines. He had tracked down Liam's place from some of those pictures—Liam lived in a fishing village on the North Irish coast. Why they spoke a funny, but recognisable, form of American there Richard didn't know. Loo and Mub were harder to pin down; there were a couple of places where the people had slanty eyes or had dark brown skin and black curly hair. Greg was the hardest because he didn't have any special skin or hair or eyes. His folks wore furry hats in winter, but that wasn't much to go on . . .

"What do we do now, Richard?" Liam broke in. "Keep thinking about the cavern, huh? Not your Daddy's old books."

For a moment Richard thought into himself, then he opened his mind and asked, "How much time have you all got?"

Mub said it was near her dinner-time. Greg had just finished

breakfast and was supposed to be playing in the shed for the next three or four hours. Loo's time was about the same as Greg's. Liam thought it was nearly breakfast time, but his mother didn't mind if he stayed in bed these cold mornings. And Buster, like Richard, had practically the whole of the night to play around in.

"Right," he said briskly when all the reports were in. "It looks like the cavern Liam found isn't the right one—the rockets don't have toys in them. Maybe it's a place for sending toys out, but they haven't arrived from Santa's workshop yet. That workshop is the place we're looking for, and it shouldn't be hard to find now that we know the sort of place to look for—an underground place with rockets."

His thoughts became authoritative as he went on. "You've got to find these underground places and see what goes on in them. We can't be sure of anything we've been told about them, so there might be a lot of secret caverns. When you find one try not to let anybody see you, look around for toys and see if you can get to the office of the man in charge of the place. If it's Santa or he looks like a nice man, ask him questions. And remember to say please and thank you. If he's not a nice man or if there's nobody there try to find out things whatever way you can. Everyone understand?"

Everybody thought, "Yes."

"Okay then. Greg will go to the cavern Liam found, because he can understand what the people say there. Liam and Buster will look for caverns on their own. But remember, once you see that a place doesn't have toys in it, leave and look somewhere else. Don't waste time. Mub and Loo will stay here and be ready to help if you need them, they can't go to new places as easily as you men can."

Richard's mouth felt suddenly dry. He ended, "All right, take off."

Buster flicked out of sight in the middle of a "Wheee-e-e" of excitement. Liam held back for a moment thinking, "But why do they have guards in the caverns?" To which Greg replied, "Maybe to protect the toys against juvenile delinquents. I don't know what they are exactly, but my Daddy says they steal and break things, and if I had kept that tractor I took from the shop I would grow up to be one." Then Liam and Greg quietly disappeared. Loo and Mub began gathering up Buster's teddybear and toys. They floated into Buster's cot with them and started to play houses.

Richard got into bed and lay back on his elbows. Buster was the member of the gang most likely to get into trouble so he listened in for him first. But his brother was in a place where each rocket was held out level by a little crane

instead of standing straight up. The sound of voices and footsteps echoed about the place in a spooky fashion, but his brother had not been spotted. Buster reported that he had looked into the noses of the rockets and they were filled with a lot of junk and some stuff which sparkled and frightened him away.

The stuff didn't sparkle really, of course, but Buster had a talent for looking through things—like brick walls and engine casings—and when he looked into the rocket nose in that way the stuff sparkled. Like the electric wiring at home, he thought, only worse. There were no toys or any sign of Santa, so he was going to try some other place. Richard switched to Greg.

Greg was in the cavern originally found by Liam. Two of the guards were still talking about seeing a boy in pajamas. Greg was going to look around some more and then try another place. Liam's report was much the same, right down to the stuff in the rocket noses which made him afraid to go too close. Richard stopped listening to them and began thinking to himself.

Why had the caverns guards in them? To protect the toys against damage or theft, as Greg had suggested? But where were the toys? The answer to that question was, some of them were in the shops . . .

A bit of conversation between his mother and father, overheard yesterday when they were in one of the shops, popped suddenly into his mind. Richard hadn't known exactly what was going on because he had been watching to see that Buster didn't knock over anything. Daddy had asked his mother if she would like something—beads or a shiny brooch or something—for Christmas. Mummy had said Oh John it's lovely but . . . Then a man from behind the counter had come up to Daddy, said a few words and gone away again. Daddy had said Okay. Then Mummy had said, But John, are you sure you can afford it? It's robbery, sheer robbery! These storekeepers are robbers at Christmas time!

Guards all over the place, Greg's theory, and storekeepers who were robbers at Christmas time. It was beginning to make sense, but Richard was very worried by the picture that was forming.

Loo and Mub had the cot pil- low and the teddybear floating in the air above the cot, with Buster's broken truck doing a figure-of-eight between them. But they were being careful not to make a noise so Richard did not say anything. He began listening in for the others again.

Buster had found another cavern, so had Liam. Greg had gone through three more—they had all been small places and plainly not what the gang was looking for. All

reported rockets with the same puzzling load, no sign of toys and no Santa. And so it went on. Richard's eyes began to feel heavy and he had to sit on the edge of the bed again to keep from falling asleep.

Mub was lying in Buster's cot being a sick Mommy and Loo was kneeling beside her being the Nurse. At the same time they had taken the truck apart and now a long procession of parts was in orbit around the pillow and teddy-bear. Richard knew they would put the truck together again before they went home, and probably fix it, too. He wished that he could do something useful like that, and he began to wonder if Loo could move people, too.

When he mentioned the idea to her she stopped being a Nurse long enough to do some experiments. Richard tried as hard as he could to stay sitting on the edge of his bed, but Loo forced him to lie flat on his back. It was as if a big, soft cushion was pushing against his arms and chest. When he tried to prop his elbows behind him, other cushions pushed his arms out straight. After he had been forced to lie flat three times Loo told him she wanted to go back to playing Nurse. She didn't like this other game because it made her head hurt.

Richard went back to listening to the searchers again.

Buster was working on this

fourth cavern, Liam and Greg on their seventh and ninth respectively. The sudden speeding up of the search was explained by the fact that they no longer walked from place to place inside the caverns, they just *went*. Tired legs, Richard discovered, had been the reason for them all thinking of this time-saving idea. It seemed to get the guards all excited, though. Everywhere the gang went there were guards who got excited—it was hard to stay hidden with so many guards about—but they had not stayed anywhere long enough to be caught. They had found lots of rockets but no sign of a toy workshop, or Santa.

Richard was now pretty sure that the guards were soldiers. In some of the caverns they wore dark green uniforms with black belts and red things on their shoulders, and only Greg could understand the nonsense words they said. In another place, the cavern Liam had searched where you could hear planes taking off, they'd had blue-grey uniforms with shiny buttons and rings on their sleeves and Liam had been able to understand them. Then in a lot of other caverns they had been dressed like that picture of Daddy downstairs, taken when he had been working in a place called Korea.

But where was *Santa*?

During the next three hours the search still failed to reveal his

whereabouts. Mub went home for her breakfast and Loo for her dinner, both with orders to come back tomorrow night or sooner if Richard called them. Liam had another two hours before his mother expected him out of bed. Greg had to break off for dinner.

But he was back to searching caverns again within half an hour, and it was then that Richard noticed something funny about the reports that were coming back. It was as if he was seeing the same caverns twice—the same red-painted cranes, the same groupings of rockets, even the same guards' faces. The only explanation he could think of was that caverns were being searched which had been searched before.

Quickly he told the gang of his suspicions and opened his mind to receive and relay. This meant that Buster, Greg and Liam knew everything that was in each other's minds having to do with the search, including the total number of caverns found up to that time together with their identifying characteristics. Knowing this they would no longer be in danger of going over ground already searched by another member of the gang. Richard then told them to go looking for new caverns.

They tried, and couldn't find one.

Altogether they had uncovered forty-seven of them, from *big* underground places with hundreds

of rockets in them down to small places with just a few. And now it seemed plain that this was all the caverns there were, and there was *still* no trace of Santa Claus.

"We've missed something, gang," Richard told them worriedly. "You've got to go back to the biggest caverns again and look around some more. This time ask questions—"

"B-but the guards run at you and yell," Greg broke in. "They're not nice men."

"No," Liam joined in, "they're scary."

Buster said, "I'm hungry."

Richard ignored him and said, "Search the big caverns again. Look for important places, places where there are lots of guards. Find the boss and ask *him* questions. And don't forget to say please and thank you. Grown-ups will give you practically anything if you say please. . . ."

For a long time after that nothing happened. Richard kept most of his attention on Buster, because his brother had a tendency to forget what he was looking for if anything interesting turned up. Buster was becoming very hungry and a little bored.

His next contact with Liam showed the other hiding behind a large metal cabinet and looking out at a big room. Three walls of the room were covered from floor to ceiling with other cabinets, some of which made clicking,

whirring noises and had coloured lights on them. The room was empty now except for a guard at the door, but it had always been that way. In Liam's mind Richard could see the memory of two men in the room who had talked and then left again before Liam could ask them questions. They had been wearing blue-grey uniforms and one of them had had gold stuff on his cap. Liam had remembered every word they said, even the long ones which he didn't understand.

The cabinets with the flashing lights on them were called a Director-Computer, and it worked out speeds and Tradge Ectories so that every rocket in this cavern, and in about twenty others just like it, would be sent to the spot it was meant to go and hit it right on the button. It would tell hundreds and hundreds of rockets where to go, and it would send them off as soon as there was a blip. Liam didn't know what a blip was, however. Did Richard?

"No," said Richard impatiently. "Why didn't you ask one of the guards?"

Because the man with the gold stuff on his cap had told the guard that the situation was getting worse, that there were reports from all over of bases being Infil Trated, and that some sort of Halloo Sinatory weapon was being used because the guards had insisted that the saboteurs were not

adults. He had said trust them to play a dirty trick like this just before Christmas, and he had told the guard to kill any unauthorised personnel trying to enter the computer-room on sight. Liam didn't know what an unauthorised personnel was, but he thought it might mean him. And anyway, he was hungry and his mother would be expecting him down from bed soon and he wanted to go home.

"Oh, all right," said Richard.

Maybe it was a sleigh and reindeer he used in Daddy's young days, he thought excitedly, but now it is rockets. And computers to tell them where to go, just like the deputy Santa told us!

But why were the guards being told to kill people? Even unauthorised personnel—which sounded like a very nasty sort of people, like juvenile delinquents maybe. Who was pulling what dirty trick just before Christmas? And where were the toys? In short, who was lousing up his and everyone else's Christmas?

The answer was becoming clearer in Richard's mind, and it made him feel mad enough to hit somebody. He thought of contacting Greg, then decided that he should try to find out if he could fix things instead of just finding out more about what had gone wrong. So he called up Loo and Mub, linked them to each other through his mind, and spoke:

"Loo, do you know the catapult

Greg keeps under his mattress? Can you send it here without having to go to Greg's place to look for it?"

The grubby, well-used weapon was lying on Richard's bed.

"Good," he said. "Now can you send it b—"

The catapult was gone.

Loo wasn't doing anything special just then and wouldn't have minded continuing with the game. But it wasn't a game to Richard, it was a test.

"Mub, can you do the same?"

Mub's Daddy was at work and her mother was baking. Mub was waiting to lick the spoon with the icing sugar on it. A little absently she replied, "Yes, Richard."

"Does it make your heads tired?" he asked anxiously.

Apparently it didn't. The girls explained that it was hard to make people, or pussycats, or goldfish move because live things had minds which kind of pushed back, but dead things didn't have anything to push back with and could be moved easily. Richard told them thanks, broke away, then made contact with Greg.

Through Greg's eyes and mind he saw a large desk and two men in dark green uniforms behind it—one standing behind the other, an older and bigger man who was sitting down. Greg was in a chair beside the desk and only a few feet away from the bigger man.

"Your name is Gregor Ivano-

vitch Krejinski," said the big man, smiling. He was a nice big man, a little like Greg's Daddy, with dark grey hair and lines at the corners of his eyes. He looked like he was scared of Greg but was trying to be nice anyway. Greg, and through him the watching Richard, wondered why he should be scared.

"And you say your parents have a farm not far from a town," the big man went on gently. "But there are no farms or towns such as you describe within three hundred miles of here. What do you say to that, Little Gregor?"

"Now suppose you tell me how you got here, eh?"

That was a difficult question. Greg and the other members of the gang didn't know how they got to places, they just went.

"I just . . . came, sir," said Greg.

The man who was standing lifted his cap and rubbed his forehead, which was sweating. In a low voice he spoke to the big man about other launching bases which had been similarly penetrated. He said that relations with the other side had been almost friendly this past year or so, but it was now obvious that they had been lulled into a sense of false security. In his opinion they were being attacked by a brand new psychological weapon and all firing officers should be ready with their finger on the big red button ready for the first blip. The big man frowned at

him and he stopped talking.

"Well, now," the big man resumed to Greg, "if you can't say how you came, can you tell me why, Gregor?"

The big man was sweating now, too.

"To find Santa Claus," said Greg.

The other man began to laugh in a funny way until the big man shushed him and told him to phone the Colonel, and told him what to say. In the big man's opinion the boy himself was not a threat but the circumstances of his appearance here were cause for the gravest concern. He therefore suggested that the base be prepared for a full emergency launch and that the Colonel use his influence to urge that all other bases be similarly prepared. He did not yet know what tactic was being used against them, but he would continue with the interrogation.

"Now, son," he said, returning to Greg. "I can't tell you how to find Santa Claus exactly, but maybe we could do a trade. You tell me what you know and I'll tell you what I know."

Richard thought the big man was very nice and he told Greg to find out all he could from him, then he broke away. It was time he checked on Buster again.

His brother was just on the point of revealing himself to a man sitting in a small room with lots of coloured lights around the

walls. There was a big glass screen on one wall with a white line going round and round on it, and the man was bent forward in his chair holding his knees tightly with his hands. He was chewing.

"Feeties . . . ?" asked Buster hopefully.

The man swung round. One hand went to the gun at his belt and the other shot out to stop with one finger on a big red button on his panel, but he didn't push it. He stared at Buster with his face white and shiny and his mouth open. There was a little piece of chewing gum showing on his teeth.

Buster was disappointed; he had thought the man might have been eating cakes of toffee. Chewing gum wasn't much good when you were *hungry*. Still, maybe if he was polite the man might give him some anyway, and even tell him where Santa Claus was.

"How do 'oo doe," he said carelessly.

"F-fine thanks," said the man, and shook his head. He took his finger off the big red button and pushed another one. He began talking to somebody:

"Unauthorised person in the Firing . . . No, no, I don't have to push the button . . . I know the orders, dammit, but this is a kid! About three, w-wearing pajamas. . . ."

A few minutes later two men ran in. One was thin and young and he told the man at the panel

to keep his blasted eyes on the screen in case there was a blip instead of gawking at the kid. The other one was big and broad and very like the man who had asked Greg questions—except he had on a tie instead of a high, tight collar. The second man looked at Buster for a long time, then got down on one knee.

"What are you doing here, sonny?" he said in a funny voice.

"Looking for Santa," said Buster, looking at the man's pockets. They looked empty, not even a hanky in them. Then, on Richard's prompting, he added, "What's a . . . a blip?"

The man who was standing began to speak rapidly. He said that this was some sort of diversion, that guards at bases all over had been reporting kids, that the other side was working up to some sort of sneak punch. And just when everybody thought relations were improving, too. Maybe this wasn't a kid, maybe this was a child impersonator . . .

"Impersonating a three-year-old?" asked the big man, straightening up again.

All the talk had not helped Richard much and he was getting impatient. He thought for a minute, then made Buster say, "What's a blip . . . please!"

The big man went to the one who was sitting in front of the screen. They whispered together, then he walked toward Buster.

"Maybe we should T-I-E his H-A-N-D-S," said the thin man.

In a quiet voice the big man said, "Contact the General. Tell him that until further notice I consider it advisable that all launching bases be placed in Condition Red. Meanwhile I'll see what I can find out. And call Doc, we might as well check on your child impersonation theory."

He turned away from the now open locker with a candy bar in his hand, stripping off the wrapping as he added, "Don't they teach you psychology these days?" And to Buster he said, "A blip is a teeny white mark on a screen like that man is watching."

Buster's mind was so full of thinking about the candy bar that it was hard for Richard to make him ask the proper questions. Ask *him* what makes a blip? he thought furiously at his brother—why were the minds of grown-ups impossible to get into! and eventually he got through.

"A rocket going up," said the big man; then added crossly, "This is ridiculous!"

"What makes a rocket go up?" prompted Richard.

The man who was watching for blips was holding his knees tightly again. Nobody was talking to him but he said, "One way is to push a big red button . . ." His voice sounded very hoarse.

Watching and listening through his brother's mind Richard decided

that he had heard and seen enough. For some time he had been worried about the safety of Greg and Liam and Buster—all the talk of shooting, and the way the guards looked so cross at just a few children who weren't doing any harm. Richard had seen people get shot lots of times on television, and while he hadn't thought much about what being dead meant, getting shot had looked like a very sore thing. He didn't want it happening to any of his gang, especially now when he was sure that there was no reason to go on with the search.

Santa had hid out somewhere, and if what Richard suspected was true, he couldn't blame him. *Poor Santa*, he thought.

Quickly Richard called off the search. He thought he knew what was going on now, but he wanted to think about it some more before deciding what to do. Almost before he had finished Buster was back in his cot, still working on the candy bar. Richard made his brother give him half of it, then he got into bed himself. But not to sleep.

Mub and Loo had never seen any of the caverns yet so he had to attend to that chore first. Using the data available in the three boys' minds he was able to direct the girls to all forty-seven places with no trouble at all. The girls were seen a couple of times but nothing happened—they were just looking, not asking questions.

When he was sure they understood what they had to do Richard let them go home, but told them to start practising on rocks and things outside his window. After that he lay on his side and looked out at the moonlit desert.

Small rocks and big boulders began to move about. They arranged themselves into circles and squares and stars, or built themselves into cairns. But mostly they just changed places with each other too fast for Richard to see. Fence posts disappeared leaving the wire sagging but unbroken and bushes rose into the air with the ground undisturbed beneath them and every root intact. After an hour of it Richard told them to stop and asked them if they were sure it didn't make their heads tired.

They told him no, that moving dead things was easy.

"But you'll have to work awful fast . . ." Richard began.

Apparently it didn't matter. Just so long as they knew where everything was they could move it just like *that*, and Mub sent a thought of her Daddy snapping his fingers. Relieved, Richard told them to put everything out on the desert back the way it had been and to start getting to know the other places he had told them about. They went off joyfully to mix the gang's business with their own pleasure.

Richard became aware of move-

ments downstairs. It was nearly breakfast time.

Since the early hours of the morning Richard had been sure he knew what had gone wrong with the Christmas business, and the steps the gang must take to put matters right again—or as near right as it was possible to put them. It was a terrific responsibility for a six-year-old, and the trouble was that he hadn't heard the grown-ups' side of it. What he intended doing could get him into bad trouble if his Daddy found out—he might even get beaten. Richard's parents had taught him to respect other people's property.

But his Daddy was usually a bit dopy at breakfast time. Maybe he would be able to ask some questions without his Daddy asking too many back.

"Daddy," he said as he was finishing his cereal, "d'you know all those rockets Santa has in his secret caverns at the North Pole? And the stuff in the nose of them that you're not allowed to go near . . . ?"

His Daddy choked and got cross and began talking to his mother. He said that he would never have taken this out-of-the-way job if he hadn't been sure that Richard's mother, being an ex-schoolteacher, could look after the children's education. But it was quite obvious that she was forcing Richard far too much and he was too young to be told about things like rocket

bases. To which his mother replied that his Daddy didn't believe her when she told him that Richard could read the National Geographic—and not just pretend to read them—and even an odd whodunit. Sure she had taught him more than a normal six-year-old but that was because he could take it—she wasn't doing a doting mother act, Richard really was an exceptionally bright boy. And she hadn't told him about rocket bases, he must have got it from a magazine or something . . .

And so it went on. Richard sighed, thinking that every time he asked a complicated question his mother and father started arguing about him between themselves and ignoring his question completely.

"Daddy," said Richard during a lull, "they're big people's toys, aren't they?"

"Yes!" his father snapped. "But the big people don't want to play with them. In fact, we'd be better off without them!" Then he turned and went back to arguing with their mother. Richard excused himself and left, thinking at Buster to follow him as soon as he could.

So the big people didn't want their toys, Richard thought with grim satisfaction. That meant the gang was free to go ahead.

All that day Richard listened in on Loo and Mub. The girls were fast but there was an awful lot to do so he set Greg and Liam to helping them—the boys could

move things, too, but not as fast as the girls. But everybody had been awake for so long they began to fall asleep one by one. When it happened to Buster and Richard their mother thought they were taking sick and was worried, but both of them were up as fresh as ever when their father came home so she didn't mention it. And that night there was another meeting of the gang in the bedroom.

"We'll dispense with the Minutes of the last Meeting," Richard began formally, then opened his mind to all of them. Up until then the gang had been acting on orders, although from the things they had been doing they must have guessed what he intended, but now they *knew*. He gave them all the pieces of the puzzle and showed them how it fitted together.

The evasions of their parents, the overflowing toy stores and the computers which could direct a rocket to any spot in the world. A strangely uncomfortable deputy Santa—they must have had some kind of hold over him at the store—and secret caverns guarded by angry soldiers and storekeepers who were robbers. And juvenile delinquents, and a Santa Claus who couldn't be found because he must have run away and hidden himself because he was ashamed to face the children and tell them that all their toys had been stolen.

Obviously the juvenile delin-

quents had raided Santa's toy caverns and cleaned them out, leaving only big people's toys which the adults themselves no longer wanted—this explained why Santa's guards were so mad at everybody. Then the stolen toys had been sent to the store-keepers, who were probably in cahoots with the delinquents. It was as simple as that. Santa just would not be coming around this Christmas and nobody would get any toys, unless the gang did something about it . . .

" . . . We're going to see that the children get *something*," Richard went on grimly. "But none of us is going to get what we asked for. There is no way of telling which one of all those hundreds of rockets is meant for any one of us. So we'll just have to take what comes. The only good thing is that we're going to make Christmas come three days early.

"All right, gang, let's get started."

Buster returned to the room where he had been given candy the night before, the room with the man who watched a screen with a white line going round on it. But he stayed hidden this time—he was merely acting as the gang's eyes. Then Mub and Loo, linked to the distant room through Buster and Richard's mind, began to move the grown-up who sat before the screen. More precisely they moved his hand and arm in

the direction of the big red button.

But the grown-up didn't want to push the button and make blips. He struggled to pull back his hand so hard that Loo complained that it was hurting her head. Then they all got together—Liam, Greg, Buster and the girls—and concentrated. The man's finger started moving towards the button again and he began to shout to somebody on the radio. Then he drew his gun with the other hand and hit his arm with it, knocking it away from the button. He was being very, very naughty.

"Why don't we push the button," Greg asked suddenly, "instead of making the grown-up push it?"

Richard felt his face going red, *he* should have thought of that. Within a second the big red button drove down into the bottom of its socket.

The Early Warning systems were efficient on both sides. Within three minutes all forty-seven missile bases had launched or were launching their rockets. It was an automatic process, there were no last-minute checks, the missiles being maintained in constant readiness. In those same three minutes orders went out to missile-carrying submarines to take up previously-assigned positions off enemy coasts, and giant bombers screamed away from airfields

which expected total annihilation before the last one was off. Like two vast, opposing shoals of fish the missiles slid spacewards, their numbers thinned—but only slightly—by the suicidal frenzy of the anti-missiles. The shoals dispersed and curved groundwards again, dead on course, to strike dead on target. The casualty and damage reports began coming in.

Seventeen people injured by falling plaster or masonry; impact craters twenty feet across in the middle of city streets; tens of thousands of dollars and pounds and rubles worth of damage. It was not long before urgent messages were going out to recall the subs and bombers. Before anything else was tried the authorities had to know why every missile that had been sent against the enemy, and every missile that the enemy had sent against them, had failed to explode.

They also wanted to know who or what had been making rocket base personnel on both sides do and see things which they didn't want to. And why an examination of the dud missiles revealed the shattered and fused remains of train sets and toy six-shooters, and if this could have any possible connection with the robberies of large toy stores in such widely separate places as Salt Lake City, Irkutsk, Londonderry and Tokyo. Tentatively at first both sides came together to compare notes, their in-

tense curiosity to know what the blazes had *happened* being one thing they had in common. Later, of course, they discovered other things . . .

That year Christmas came with the beginnings of a lasting peace on Earth, although six members of a young and very talented gang did not appreciate this. The toys which they had put in the noses of the rockets to replace the sparkly

stuff—which they had dumped in the ocean because the grown-ups didn't want it—had failed to reach them. They had been worrying in case they had done something very wrong or been very bad. They couldn't have been *very* bad, however, because Santa came just as they had been told he would, on a sleigh with reindeer.

They were asleep at the time, though, and didn't see it.

Through Time And Space With Ferdinand Feghoot: XLVII

The mass migration of neo-beatniks from Earth to the Moon took place after 1980, when space travel became cheaper than staying at home. Soon beat bars were infringing on such luxurious developments as Moonolulu, Moon Goddess Meadows, and Sky-Vegas Executive Homes. Finally, after an all-night catnip-and-bhang party in the once-sacrosanct lobby of the Copernicus-Hilton, the authorities took appropriate action. They summoned Ferdinand Feghoot from the 38th Century.

Feghoot timed in outside a beat hangout, "The Lunching Pad." It was surrounded by a menacing crowd of respectable citizens, uttering catcalls and brandishing golf clubs. The beat men, wearing huaraches, beards, torn jeans, and helmet liners decorated with abstract designs and Henry Miller quotations, beat their bongo-drums in the background. Their women were much more aggressive. Dressed in prolapsing black sweaters and leotards, they wore odd nineteen-sixtyish hairdoes which looked as though they had stood at just the wrong moment under very big birds, and which they had pulled out into hang-down scallops that almost covered their faces. They advanced, mouthing lewd threats, their rosy curtains thrust forward.

Obviously, only precisely the right phrase, instantly spoken, could distract both sides and prevent civil war.

"Peekaboo, like!" chuckled Ferdinand Feghoot, pointing straight at the oncoming phalanx. "The Lunachick Fringe!"

—GRENDAL BRIARTON

That everybody tended to behave largely as though he were not there did not dismay Harrison. It would have been nice, of course, if somebody seemed to know who he was . . . but what was terrifying was the revelation that he himself had only the mistiest idea on the subject.

A TIME TO KEEP

by Kate Wilhelm

HARRISON HAD BEEN WITH THE English department of the university for twenty-five of his fifty-five years, and for twenty-two of those years he had been a widower; beyond that no one seemed to know anything about Harrison. He had a penchant for turning the conversation from himself, not as if he had anything to conceal, but rather as if there never before had been anything to be discussed.

He was, away from the university, like a policeman out of uniform, seen with only partial recognition by his fellow faculty members, and never noted at all by his students. In a vague, semi-conscious manner he was aware of his own insignificance and once even tried to grapple with it by volunteering to serve on a faculty committee investigating intramural gambling. His contribution to the study lay in a prominent position

on his desk for several weeks, then less prominently on an easily accessible book shelf, from there to a file, and finally was burned, uncalled for and unread. He never volunteered again.

He was sitting at his desk, grading papers, when Miss Frazer knocked lightly on his door. She knocked a second time and thrust her homely face around it. "I said, do you want a lift across the bridge? It's raining."

"Thank you," he said looking up quickly, almost guiltily. "Are you leaving now?"

"Fifteen minutes or so. Don't hurry." She checked his clock over the door with her watch and added, "I'll be in the faculty lounge."

Harrison clipped together the papers he had finished and slid them into his briefcase along with his books. It was four twenty-five. The wind drove the rain against

his windows in violent, erratic flurries of activity and he sat watching it for a few seconds thinking it was kind of Miss Frazer always to remember him when the weather was bad. No one else ever had.

He closed the venetian blinds on the windows then and flicked the wall switch, shrouding the small office in deep shadows with only the rectangular, elongated streak of light that shone through the transom to relieve the darkness of the early October evening. Harrison grasped the door handle and opened the door. . . .

. . . He was walking against the driving rain, his head ducked low in an effort to catch the most part of the onslaught in his hat brim. The bridge stretched endlessly before him, bare of traffic, devoid of light, only the faint wavering house lights on the far side to show that it did indeed have an end. He felt the cold rain seeping into his shoes, pressing his trousers against his legs in a clammy embrace. His chest cringed back into itself as the frigid water soaked through his suit coat, into his shirt and plastered it tightly against his body. He could feel himself shivering deep inside and lengthened his stride watching his feet slosh through rivulets of forging water that covered his shoes. The lights seemed as far as ever from him, he thought with a mild thrill of sur-

prise when he raised his eyes again. Now his thighs felt warm and tight with the strenuous pace he maintained and incredulously there was a tingle of excitement that ran through him. He lifted his head and let the rain sting his face with immeasurably fast, icy needles that only touched and tested and didn't pierce. It felt good, and he walked head up in the furious rain. The house lights shone brightly as the wind ebbed, only to fade and become ghost-like as a new curtain of water obscured them once more. Their distance didn't seem to have changed. Harrison walked steadily, unthinking, face on into the rain.

He heard a cry of fear and pain ahead of him before he could see anything in the lightless dusk. Then he did see figures; two youngsters, teen agers, and an elderly man. One of the boys was nearly six feet tall, looked as if he belonged on the campus football team; he was holding the old man by his arms, smiling. Harrison tore his eyes away from that incongruously sweet smile of the boy to look instead at the other one. Shorter, lighter than the one holding the man, he was rifling through his pockets rapidly, but thoroughly. When it appeared there would be too little to be of consequence, he began to swear in a vicious, tremulous voice and his right hand lashed out to swipe again and again at the pain-con-

torted face of his victim. The man groaned and went limp, his arms outstretched in the hands of the tall, athletic youth. The boy let him go and very slowly he crumpled to the concrete. Water swirled over his hands, made a rust colored eddy about his head, was dammed up by his body. The boys turned together and looked at Harrison. The tall one was still smiling, and he looked like an angel discovering the delights of heaven. Harrison turned and ran. There was a door . . .

He slammed the door behind him and leaned against it trying to catch his breath. He turned from it dazed and blinking in the cold, daylight of the fluorescent rods on the ceiling of the hall. His clothes were dry, but he shivered still and his heart was pounding thunderously in his ears shaking his entire body with its force. Instinctively he looked at his watch and it was four twenty-seven. He drove home with Miss Frazer.

Characteristically he made an early appointment with his doctor and during the next weeks he managed to push the memory of the frightening hallucination back, behind other memories whose edges were long since blunted with polishing.

The next time was during the Christmas holiday. Snow lay in deceptively soft looking piles everywhere and where the streets and sidewalks appeared swept

clean, there was a glistening overlay of ice. The telephone lines sagged with its weight, the wires encased in half inch translucent tubing. Trees dipped their branches to the ground and in the night silence the burdened branches cracked and splintered with nerve shattering, rifle blasts of noise. Long icicles pointed pale witches' fingers over every window and gathered in conspiratorial clusters at every corner of the eaves. Harrison sat staring out his study window, looking through the melted spot in the fairyland of frost tracings on the pane. He could see the tops of the university buildings in the distance across the bridge, looking as if they were hung from the indeterminant sky by thin ribbons of smoke from their chimneys. He wished that the holidays were over, had never even begun.

For nearly an hour he sat quietly, his book on his lap unopened, and when he turned his gaze once more to the window the small melted spot had frosted over. He held his hand against the window for a minute or so and looked again. The sun was still diffused to the point of nonexistence by the colorless, formless clouds and the light had an unreal glow to it.

He had some early term papers to read; several books had accumulated still in their wrappers, and his own library catalogue was incomplete, but he found a growing restlessness overwhelming

him. He decided he was hungry and since the woman who came in to clean and cook hadn't been able to come over the icy roads, he'd have to do something about it himself. A feeling of relief accompanied the thought of being busy. He went through the hall to the kitchen and opened the door. . . .

. . . The river bank was gentle in descent; nevertheless it was treacherous with its generous coating of ice. He edged along cautiously, sliding his feet several inches at a time rather than lifting them to walk. He heard laughter ahead of him and looked up in surprise. They were skating today. He watched in pleasure as the figures glided and darted effortlessly in a blur of flying scarves and stocking caps.

There were twelve children. He counted them and there were exactly twelve, laughing and shouting as they played. They were all very proficient, more so than the mediocre assortment the ice usually attracted, rather as if they were practicing for an ice carnival. He edged closer.

"There he is!" one of the little ones shouted excitedly. In a second they were all skating rapidly toward him. In consternation he glanced behind him to see if they might have sighted someone else he had missed, but it seemed obvious that he was their target. They converged on him and

skates were thrust out toward him.

"I'm afraid you're mistaken," he started, but they appeared not to hear.

"Put them on! Put them on!" they chorused clapping their hands.

"I can't skate," Harrison protested trying to back away.

"How do you know that?" another voice asked interestedly.

He whirled about and stood face to face with a blond, bare headed girl. She had two red spots on her cheeks from the cold, and her eyes sparkled blue lights. "How do you know?" she repeated.

"I never did it," Harrison said simply.

"See. You don't really know, do you?" she answered logically. "Put them on."

Hands reached out eagerly to help with the skates and then he was skating hand in hand with the girl. They skated out to the center of the ice where the children made a circle around them. The children wore tight, vivid pants and high necked sweaters in the brightest colors he had ever seen: reds and yellows and blues so dazzling that they hurt his eyes almost. The girl was similarly dressed, her pants a screaming orange, her sweater forget-me-not blue that wasn't as clear as her eyes. He was aware of himself fleetingly, of his baggy old slacks

that were no longer presentable enough for school, of his grey, shrunken sweater that had one elbow out. But as he looked into the deep, shining eyes of the girl he forgot; he knew only that he was warm and vital.

"Who are you?"

"Gabrielle. Come, we must lead them."

"Why?"

"They expect it of us. This way."

She led him and they were streaking across the ice faster and faster, and behind them, as if attached with invisible cords, the children followed in a serpentine line. Gabrielle turned on one skate and was facing him, both of her hands in his. "You're quite good," she said.

"Where did you and these children come from? I've never seen you about before."

She laughed and her hair whipped about her head hiding her face for a moment. She said, "We're leaving them too far behind. Let's go back."

"No!"

She laughed again and was off and away from him before he could turn around. The children were brilliant specks on the white glare of the ice far in the distance. He pumped harder and harder to catch up with Gabrielle. "Wait for me! We'll go to my house and have hot chocolate. It's just over there!"

She smiled over her shoulder and nodded. The children were doll sized now and he could begin to make out their features once more. He waved to them and they all waved back, their voices, faint with distance, seemed to be joined in a song.

Harrison sang too, feeling a surge of power flow through his legs as he sped over the ice. He felt free and clean and strong and he marveled at his ability to skate so well. Ahead Gabrielle had joined the youngsters and all together they were coming to meet him. Their blades flashed in unison and he looked down to see his own blades cutting through the ice. His heart froze within him. There was a crack and even as he watched, it grew wider and he could see the swift, black water below. He turned to his left away from it and watched it appear silently, magically, as a thin, black line separating the two halves of the river.

"Gabrielle! Get off! Get off!" he called frantically, but the children sang and waved and he knew they didn't hear. He pointed down at the growing, widening crack, and they laughed. Now they were close enough to see the half-dollar sized red spots on their cheeks, to see the color of their eyes and the whiteness of their teeth.

"Get off! Off! he screamed over and over as he clambered for the bank, his feet slipping from under

him again and again. The crack now appeared to be frozen lightning, streaking out in many directions, sending erratic patterns up and down the length of the river.

Gabrielle and the children skated on and beyond them a cake of ice up-ended and disappeared into the torrent. Then another and another was swallowed silently and still they skated toward him. In horror he watched as the cracks appeared on their ice and one by one they were isolated from each other. He was falling again and desperately he lunged out to grab a stump on the river's edge. When he turned again he saw Gabrielle standing still on the other side. Her eyes followed the progress of the cracks and then turned to meet his. She seemed to be waiting. The children, for the first time, appeared to realize what was happening and they turned panic stricken faces toward Harrison. He could but stare back, the words dead in his throat.

Gabrielle was out of her skates and bare footed, running swiftly across the gaping breaches gathering them before her. Together they leaped across the last of the cracks and stood on the opposite bank. They didn't look back.

Harrison cried out, "Gabrielle!" She walked hand in hand with the youngsters, diminishing rapidly until he could see them no longer.

He ran. He ran along the bank, his skates dropped, forgotten. He had to get across. His feet rang hollowly on the frozen bank and he ran and stumbled and ran again until his breath didn't come, until his lungs heaved uselessly and he finally fell and lay still, gasping. Time didn't exist and it might have been seconds or hours later when he pulled himself to his knees and looked about wildly. There was a light and he crawled to it, slipping and sliding, clawing at the ice, clutching at the air. His groping fingers found a handle and he fell inside the door almost unconscious. . . .

He stumbled into his kitchen and collapsed into a white enameled chair with a red checked cushion. Behind him the door swung back and forth whispering past the frame and finally came softly to rest. He looked about him maniacally, hanging onto the table top, his breath coming in convulsive gulps and he felt as if his heart might explode. He still felt the cold ridges along one cheek, on both legs and arms and all up his body where he had lain on the ice.

"What's happening to me? My God, what's happening to me?" he whispered. "What's happening?" he repeated under his breath and clutched at his face with both hands as if to blot out the memory.

He had another fruitless session with Dr. Glaston the day

before school resumed. Then the finals were in for grading; goodbys had been exchanged with a class of personless students; faculty meetings were posted to plan for the coming semester. Now he attended every meeting there was; he welcomed Miss Frazer's standing offer for a ride home and even accepted her invitation to dinner in her apartment.

He was surprised at himself at being there, and, being there, at enjoying himself. The meal had been delicious and Miss Frazer was amusing. She was nearing forty, a rather square figure that couldn't be glamorized by her expensive clothes. Her hair was graying, but curled about her ears like a girl's. She was new at the university, had traveled a good deal and could tell about it charmingly. Harrison was glad he had come. Miss Frazer was exactly what Dr. Glaston meant when he said he needed amiable companionship, to be alone less. When the clock chimed the half hour after nine, he looked at it in disbelief.

Miss Frazer must have sensed that he was readying himself to leave and very briskly she rose to her feet and said, "You've enjoyed yourself, haven't you? You'll have to come back after the new semester starts. We can play chess."

So Harrison began "seeing" Miss Frazer. Late in February they had dinner and played chess un-

til nearly midnight. When she said, "See you next week?" at her door, it seemed natural to agree. He didn't bring it about; it just happened that way, and it was pleasant to have somewhere to go, someone to talk to. He decided Dr. Glaston had been entirely right, and he found that he was sleeping better without the haunting dreams that had threatened for awhile to make sleep a form of torture.

It was Thursday, dishes were stacked in the sink and the chess board was set up with a partially completed game. It was her move. She leaned back in her chair studying the board intently, one hand reaching for her cigarette lighter. She flicked it several times and put it back down. "Get a match, will you, please. Second shelf, right side."

He smiled to himself. She hadn't even seen it, had made no move to block his coming Knight fork. He pushed the door to the kitchen. . . .

. . . He left the apartment building uneasily, lingering in the doorway aware of a foreboding sense of danger. The street was empty with only a fitful squeaking through the bare tree tops that made a futile canopy overhead. Still he paused, unable to locate the source of his discomfiture. When he began walking down the street, he was cautious without reason, the not right feeling of

things persisted; a primordial fear had roused and was worrying at his consciousness. He stepped off the curb to cross an alley and before he could back up or get fully across he was engulfed and swept up by a mob of yelling men and women.

Hands pushed at him and bodies pressed against him as he tried to resist the force of the mob. He was carried along by it as a leaf is inescapably a part of the stream that floats it. They were cursing, shrilling, incoherent, infuriated mad men and he was of them. A wild intoxication flowed through him and he clapped his hand on the shoulder of the shoving man at his side. The man turned to look at him, but his eyes were vacant as if he moved in a trance. His mouth dribbled little specks of sputum from the corners and he cried hoarsely, "Kill him! Kill him!"

Harrison recoiled sharply and was jabbed in the side by a little woman carrying a stick. Her eyes were empty above a working, screaming mouth. She was lost in the swirling bodies. Somehow Harrison found himself half turned, being pressed onward sideways, and always before his horrified eyes were the vacuous expressions, the calm, almost peaceful emptiness of the upper faces and the filth of the gibbering, screeching mouths. He was yelling too, begging them to let

him go, helplessly flowing along with them.

Someone would be trampled to death, he thought as he stumbled and frantically caught at an arm to restore his balance. The police would come and break it up. They filled the streets, overflowing into the sidewalks and yards. On and on they weaved, gaining speed and strength by the second, their voices an intolerable din. Harrison felt he couldn't breathe; he hurt from the constant jabbings he received as he kept trying to shove his way to the side of them. He couldn't see the ending of the long, senseless stream of robotic shapes. Now they were virtually running and he had to run also, or die under their feet. They wouldn't stop if he fell, and he hated them and was afraid of them, knowing that no matter how fast he ran, he was part of them and couldn't leave them behind.

They stopped abruptly as definitely as a single unit with no preliminary slowing down, no shoving. Only Harrison was caught off guard and his momentum carried him several yards ahead of the rest. The mob had become ominously silent, unbelievably silent. He whirled to his right and saw the inviting blackness of an unpaved alley. He looked again at the mass of stilled bodies as immobile and expressionless as mannekins, as if someone had turned them all off. It

was as if they waited for further instructions. Nowhere did he see comprehension or even awareness and slowly he began to edge to the side toward the waiting alley of escape. Their eyes didn't see, but their heads turned almost imperceptibly to follow his progress. A colder terror seized Harrison, gripping his bowels, jerking his stomach spasmodically. He backed away from them almost fainting with fear, and suddenly his nerves could stand it no longer and he screamed shrilly and raced madly down the blackness of the alley. He could hear them as they were released from their trance-like stance, and now he knew it was him they wanted. He ran until his legs buckled under him and he fell headlong through a door. . . .

He fell to his knees gasping and panting for breath. Dimly he became aware of Miss Frazer's hands on him loosening his collar, undoing his belt. He had got away! In relief he opened his eyes.

"Keep breathing deeply," Miss Frazer said firmly. She was tugging at him apparently trying to back him against the wall, and still dazed, he helped until he was propped up by it. "I'll get you a drink," she said.

The unaccustomed whiskey burned harshly, but the terror melted away, leaving confusion and a sense of embarrassment over making a fool of himself. He

avoided Miss Frazer's appraisal ashamedly and started to rise, but her competent hands held him down with his back against the wall.

"Stay right there for a few minutes," she ordered, stared at him for a moment and turned to get the bottle and a glass from the counter. "I think I need this more than you do."

"I'm sorry I frightened you," he muttered, "but I am all right. I stumbled."

"Yes, you stumbled," she agreed dryly. "And your heart decided to run a race all by itself, and you couldn't breathe. Do you know what happened to you?"

"I stumbled," he repeated stubbornly. "And right now I feel like a fool," he added through tight lips. It happened again! he cried to himself despairingly. Why?

Miss Frazer took several steps backward, and when he did get up alone, she seemed surprised. "Harrison, have you done that before?"

He nodded. "But it isn't my heart. I had Dr. Glaston give me a complete check. My heart is perfect." He shuddered violently and looked directly at her in desperation. "Do I look like I'm losing my mind? Am I going crazy?"

"Don't be ridiculous! There could be a lot of things to cause you to fall. Blood pressure. Disease of the inner ear . . ."

"The doctor checked everything," he cut in rudely. "Or-

ganically I am in excellent condition. I live through it, but it doesn't take any time," he hissed wretchedly. "I go through the door to somewhere else, and then I come back, but it doesn't take any time!"

Miss Frazer frowned down at the table top a moment, raised her eyes to meet his and finally said slowly, "I don't know what you're talking about, Harrison. But believe me, I do not believe for a moment that you are any more insane than most of us. Now you sit still while I make coffee and we'll talk."

Haltingly at first, with much hesitation over words, he began with the first time it had happened to him. Then more surely when she didn't laugh or interrupt, he continued with words flowing effortlessly until he concluded, "I remember how miserable I felt with freezing rain soaking to my skin. I remember the feeling of the tightness of the left skate. It was almost tight enough to rub a blister. And later I was cold where I had been against the ice. Those things are real! They happened!"

"Walter Mitty's other life was real to him," she suggested.

"But he dreamed of things he wanted to do," Harrison cried. "He was his own hero. God, I hated that man I was! I'm ashamed of him. He—I could have done something about the

children. I could have helped that old man. I could have tried to reason with the mob. Do you think I'd daydream about a coward?"

"Harrison. Harrison. You are talking nonsense. No one can control his dreams. You have to believe me, this is a dream of a sort. So you ran. That's one of the classic dream patterns."

Wearily Harrison rose from the chair, and he felt old and tired. Quietly he said, "In my real dreams I never run."

"Don't go yet, Harrison. Are you sure you're all right?"

"I'm sure," he said. "I'm sorry about all this. I didn't mean to . . ." He stared at his hand outstretched for the door and he felt that he couldn't move. Fascinated he reached out for the knob and again a paralyzing dread mastered him and he was unable to open the door. Suddenly he turned and crossed the room unsteadily to stand at the counter gripping the edge of it tightly. "I can't seem to open the door," he muttered despising himself.

"Harrison, I'm going to open the couch and fix you a bed. It makes a very comfortable bed, and I'll give you a sedative so you'll get a good night's sleep. And in the morning I'm going to take you to Dr. Blakesley."

Harrison stood there not answering and she left the kitchen. He closed his eyes tightly a mo-

ment and again turned to face the door. He still couldn't force himself to touch it. Panic was rising within him unbearably as he tried, and uncontrollable, atavistic fear made him cower back away from it. He knew he would have lost consciousness, or started screaming, if he hadn't left it.

He lay in the unfamiliar room and drifted aimlessly midway between sleep and wakefulness as the two pink pills she had ordered him to swallow dulled the razor edge of his thoughts. The mob wouldn't have listened to him. It had been a trick of his twisted mind that led him to think they awaited his orders. Running wasn't the real crime. Other people seemed always to know what to do, like Miss Frazer, and his wife years before, and his mother long before either of them. He thought pleasant thoughts about his mother and somehow she grew more like Gabrielle, merging with the girl until only the golden haired girl remained. She had known what to do, but there had been a difference. Why? He tried to rouse himself from the lethargic non-awareness of his wandering mind and hold onto the question. Why had Gabrielle been different? It was important. He couldn't remember, and trying, he fell asleep.

"Oh, no you don't!" Miss Frazer said as she poured their breakfast coffee. "You promised

me you'd see Dr. Blakesley this morning and you are going to do it."

"You really think I need a psychiatrist then? Just because I fell down and was frightened for a time?"

"Have you opened a door yet?"

Harrison looked behind him at the kitchen door standing open and shook his head. It had been opened by her.

Miss Frazer chatted amiably through breakfast, and in the car on their way to the university where Dr. Blakesley lectured two mornings a week. Harrison wasn't listening to her, and she seemed to realize it, and made no effort to draw him into her soliloquy. There had been something, he was thinking, something he had almost grasped, and missed.

Miss Frazer parked the car and led the way into the Natural Science Building, holding the door for him. Sheepishly he followed her. She hadn't given him a chance at a door all morning. Gabrielle would have, he thought with assurance. Unlike the others, she had given him the opportunity to act first and he had failed. But she hadn't assumed he would. He was acutely conscious of Miss Frazer's startled grunt as he pushed past her and opened Dr. Blakesley's door. . . .

. . . There were eleven other men in the room, many of them drinking coffee. The air was thick

with stale smoke and the press of bodies too long in one place. Harrison looked straight ahead stoically pretending he wasn't listening to the nasal voice inches away from his ear.

"Y'know he done it, Harrison. All that evidence against him. What more do you need?"

He sat without moving, making no sign. The foreman leaned across the table to point an accusing finger at him. "If he gets off, he'll keep doing it. You know that!"

"He might not be guilty," Harrison said stiffly.

"Everybody knows he's guilty!"

"He never denied it!"

"He wouldn't be here if he wasn't guilty!"

Harrison felt a numbness creeping along his body and incongruously all he wanted to do was sleep. He put his head down on his arms pretending to be thinking about it. The voices continued persuasively.

"The judge will be lenient, Harrison. It's not like you were sentencing him to die or anything like that."

"But he'll die," he mumbled.

"We'll all die," the other one answered impatiently.

"If he didn't do it, he wanted to. That's just as bad."

"That's as bad as doing it," someone else echoed solemnly and it was taken up and reiterated over and over.

"We don't know that he did. We don't know," Harrison protested desperately.

"Harrison, we're all agreed that he's guilty. Are you with us?"

"I can't decide."

"Have you ever decided anything in your life?" asked a new voice.

Harrison looked up at the speaker and it was Dr. Glaston.

"I'm sorry, Harrison," he said. "I had to tell you the truth. There wasn't a thing wrong with your heart. I'm sorry."

"I know," Harrison said. Why did he say that? What a curious thing for a doctor to say.

"You really do have to make up your mind, you know. They'll be calling us back soon," Dr. Glaston said gently and returned to his seat.

Harrison licked his lips and met the gaze of the foreman. Mutely he nodded and the Greek chorus rumbled approval. They filed back into the court room awkwardly, embarrassed by the stares of avid curiosity their re-entrance aroused. Harrison stood before his seat until they were all present and as one they sat down.

The accused sat turned away from them as if he alone in the room had failed to notice that they returned. The judge cleared his throat.

The prisoner stood and faced them, but Harrison kept his eyes on the straggly hairs on the red

neck before him. He couldn't bring himself to look at the tormented face of the guilty man. The verdict was read and a great shout broke out among the spectators. Above and through it rang out the judge's gavel demanding order. Slowly the noise subsided. The man on Harrison's left whistled softly under his breath.

"Betcha he wants us polled," he said knowingly.

"Polled?"

"Yeah. Wants us to stand up one at a time and say it."

Harrison felt the lump return to his stomach where it swelled. The man at his side grinned as if he knew.

"Won't take long," he said wisely. "Then you can head for the john."

They were both silent as the first man, the foreman, repeated, "Guilty," firmly, and then the next, and the next. The prisoner remained turned away from them, only beginning to move toward the light as the man next to Harrison heaved himself to his feet. "Guilty," he said quickly and sat down again. Harrison felt frozen to his chair only stirring when the judge frowned disagreeably at him. On both sides the men were pushing at him and somewhere to the side he heard, "You better not renege now."

He rose swaying and stared into the eyes of the other man, into the face he knew so well. The

face was empty, emotionless, unlined in looking. It was his face.

He yelled and leaped from the jury box racing from the courtroom, out the double doors in the rear before anyone seemed to realize what was happening. He ran as if pursued by all the devils of hell, but through a void of silence. No one chased. The streets were deserted; not even a dog barked at his flight. He ran to the corner and across the street and nothing moved along its length except him. It wasn't fair, he sobbed. It wasn't fair to make him be the one to decide. The system was wrong! He wasn't a bad man. He wasn't guilty, but was he innocent? No man could decide it. It wasn't fair. Why didn't someone come and stop him? They could stop him if they tried. He pushed himself away from a building and staggered on, wheeling back to crash into it dizzily. He had to keep going.

The sidewalk ended and he plummeted into a wall ahead of him, stumbling down to his knees. He forced himself back to his feet, but stood half crouched over, hunched as if in great pain. His fingers groped blindly for something to hold, finally finding a handle. He gripped it hard and stood stiff and still waiting for his breath to return.

It was a door handle. He turned it and the door began to swing open. He could go through

it, let Miss Frazer and the doctor take care of him—the circle completed. He thought about the man back there who looked like him, but was empty and so very, very guilty. He at last recognized the enormity of the guilt. Not of being; that was accidental. But, having being, of the failure to be more than the insubstantial shadow that hovers awhile and then passes, leaving nothing of itself to mark its passage. Not on one single individual in need, not on a woman and their un-born children, not on humanity as an entity. He had failed them all. And now this, the final test, the ultimate decision, the opportunity most men recognize somewhere along the way, but that he had never before faced knowingly.

Deliberately he placed his foot

back again and withdrew from the doorway. They would not come. To be forced to choose was not to choose at all. They knew. He looked down the empty streets. It would take much longer to walk back the path he had run before, but he started, and in starting, he felt peace, and he walked straight and tall through the empty streets. . . .

Inside his office the doctor rose as the hall door was pushed open. He didn't recognize the man who paused in the act of crowding in past Miss Frazer, but assuming it was Harrison, he was prepared to see him display the neurosis the opening of doors triggered. He was not prepared to see him slump to the floor—the unmistakable stamp of death already composing his features.



One of the better historical novelists (and a long-time science fiction fan) here turns his usually trusting blue eyes on a problem looming steadily larger on our cultural frontier. . . .

INTERPLANETARY SEX

by Jay Williams

WITH SPACE TRAVEL PRACTICALLY around the corner, there has been a flood of scholarly articles on the various problems men will meet once they have launched themselves off the earth, from matters of space medicine to the tangles of interplanetary law. Even the average citizen, who doesn't intend to get any closer to the Music of the Spheres than the pool-room in Kelly's Bar & Grill, is well up on the methods of adjustment to weightlessness, or how to plant the flag on an uninhabited planetoid.

In only one field have the pundits avoided any real investigation, and that is the matter of what the intrepid pilot of the first rocket ship to Mars is going to do with his time during the monotonous no-day, no-night of his journey.

According to authoritative sources (*The Book of Knowledge*, vol. 9) the distance from here to Mars is something over thirty-five

million miles, which means that at the most breathtaking speed available now, it is going to take somewhere in the neighborhood of eight months, give or take a couple of weeks, to complete a one-way trip. When confronted with this fact, all the scientists I have spoken to have been inclined to blush and giggle and shuffle their feet, while mumbling, "Well . . . books . . . or solitaire . . . possibly games." It is high time, I believe, that some recognition be given to the fact that Man doth not live in bed alone.

The trouble is that both the scientists and the top brass who have been dreaming of colonizing distant planets, have a cockeyed notion of what the interplanetary explorer is going to be like. Their vision is of a kind of Boy Scout, clean, brave, loyal, reverent, trustworthy, and dewy-eyed enough to think that girls buy their clothes with bumps sewn into them so they can tell which is the front.

These notions come, I believe, from too much reading of advertisements which show Americans rollicking around among the pop bottles or munching candy bars.

It is high time the people in the Pentagon put down those women's magazines they are always reading, and faced the fact that most American men know all the four-letter words.

This general puritanical conception, while it may be true of certain military personnel—Regimental Executive Officers, for instance—never held true of any airmen I ever met. These gentlemen, while undoubtedly brave and trustworthy, were noted for the casual manner of their dress, their frequently intemperate language, and the fact that they enjoyed many of the minor vices such as drinking and women. This may have had something to do with the hazardous nature of their occupation, which led them to be rakish, devil-may-care, and just plain crazy.

When you come to think of it, any man daring enough to fling himself into outer space is probably also daring enough to hold hands with wenches. It is doubtful if more than a tiny handful of fliers still believe that the stork brings babies. It is difficult to imagine such men having a high old time during the better part of a year by playing lotto against a digital computer.

There is, of course, the strong possibility that the first space pilot may smuggle into his machine a small quantity of pornographic material: pinup pictures, old copies of *Playboy* which can be brought on board disguised as Operational Manuals, orgy sequences from Biblical movies, and the like.

But experience in remote outposts like the Aleutians, Midway, and Hattiesburg, Mississippi, has shown that while these substitutes have an undeniable value, it is only temporary; after about six months, the subjects are afflicted with edginess, a tendency to babble wistfully about past exploits, fist-fights, drunkenness, and an almost irresistible desire to start walking towards the nearest exit. It should be remembered that in outer space this last is impractical.

There has been some whispering in corners about the possibility of supplying interplanetary vessels with a machine, to be known as the Dame Compensator Mark I. As near as I can find out—nothing official, of course, since the project is Utterly Top Secret—when a space pilot felt an unbearable yearning for gentler companionship than the stars he would throw the switch on this machine, and at once he would be patted on the head, his necktie would be straightened, and a soothing feminine voice would tell him to go on out and mow the lawn and fix the storm windows and check the rock-

et exhausts like he promised to last week and for heaven's sake, George, to stop mooning around like a sick calf.

I submit that this machine, useful though it might prove in short hops like that to the Moon (220,000 miles) would have a limited value—even if its lubricating oil were scented with Chanel No. 5—owing to the difficulty of smuggling up to a train of gears.

It appears, therefore, that the wisest move the planners could make would be to include in the equipment of the first Mars-bound space ship a young and attractive female. It is possible that this proposal will cause apoplexy among the more strait-laced members of the congregation. However, everything could be very easily arranged—and legalized—by making the whole thing a security matter. To begin with, the Pentagon could put it on a bluff and hearty footing by establishing a T/O, or Table of Organization for space ships which would state matter-of-factly:

"All vehicles designed for interplanetary flight shall contain the following personnel:

- 1 each Major . . . pilot/
navigator
- 1 each Sgt (WAC)
clerk/typist"

Next, a paragraph covering all phases of the operation would be inserted in Army Regulations.

"AR 49976, Sec. 12: Procedure governing relationships of personnel on Vessels, Space, Outer:

a. There shall be no fraternization between commissioned officers and enlisted personnel on Vessels designed for interplanetary travel.

b. Paragraph (a) shall be suspended at the discretion of the Commanding Officer of the vehicle."

Paragraph (a) would, of course, silence the objections of the Legion of Decency. Paragraph (b) would silence the objections of the pilot. If the clerk-typist had any objections, they would have to be referred in quintuplicate through all conceivable channels, by which time the spaceship would be on Mars. If, by some chance, there were still bodies of citizens who objected on moral grounds, the matter would be referred to a Senate Investigating Committee, but by the time the ship got back from Mars there would almost certainly be a new Administration anyway.

I anticipate that many people will agree with this solution to the problem, but will insist that the whole thing could be simplified by having the pilot and his assistant get married before the voyage commences. There are several strong objections to this course of action.

If you take a young newlywed

couple and lock them in a cramped, metal room full of machinery, probably they will not be likely to notice, for the first couple of months, that it isn't the Plutocrat-Hilton. Things will be different by the time they reach the asteroids, however. By the six hundredth serving of vitamin capsules and K-rations, the husband will begin talking about Mom's can-opener, and the wife will begin noticing that he doesn't bother to press his space-suit any more. By July, they won't be speaking to each other, and they would still be a considerable distance from their goal.

It would all be quite otherwise if they were unmarried. The first six months would be spent in pursuit, rather than conquest, which would be much more interesting than lotto. It is a well-known fact that when a man is dining with someone who isn't his wife, he doesn't pay as much attention to his food as if she is. There is something about a marriage license, too, which tends to bring out the worst in many women. For example, mistresses are rarely back-seat drivers. Think of the awful fate that would overtake a spaceship driven by a husband-and-wife team:

"My God, George, you're doing over three thousand miles an hour! Watch out for that meteor. There, you just missed it by a hair. I don't want to say anything, but I think

you're off-course again. Isn't that the sun? Don't say I didn't tell you. Look out, there comes another meteor—no it isn't, it's the Moon. What in God's name is the Moon doing out here? . . . Well, I *know* you didn't put it there, I was just . . ."

In this matter, the Russians may possibly have the edge on us. Russian naval and merchant vessels for years have carried women, whose jobs are those of stewardesses: house-cleaning, tea-making, bed-making, and (although this is not officially admitted, of course) bed-unmaking. If they carry the same procedure over to space ships, I predict that we were going to have a waiting list of defectors who will want to join the Russian interplanetary flights, even if the Red clerk/typists are somewhat dumpier than ours.

Another problem, and a serious one, which argues against husband-and-wife teams landing on other planets is the question not of *our* morality but the Martians' morality. We have no guarantee that they are going to see eye to eye with us. It is within the realm of possibility that among Martians the most indecent thing in the world is for two members of the opposite sex to be joined in matrimony. We are going to look pretty silly if our first emissary steps out on the sands of that planet and says, "Gentlemen, allow me to present my wife," and winds up be-

ing stoned to death for his dirty language.

All in all, we are going to have to devote a good deal of sober thought to the idea that things on other planets may be a little unfamiliar just at first. For instance, there's a school of thought which maintains that the Martians are giant brains with extremely feeble and attenuated bodies hanging from them. If this is so, our first explorers are going to have to be prepared for, say, gala receptions at which the most gorgeous woman present will be the one with four servants holding up her head. Our explorers will be taken to thinking parties, and to theatrical first-nights of the Martian equivalent of *Romeo and Juliet*:

Romeo: Let $f(z)$ and $g(z)$ be polynomials with rational coefficients and let $f(z)$ be irreducible.

Juliet: An irreducible equation has no root in common with an equation of lower degree having rational coefficients.

Romeo: Ah, spite! The roots of an irreducible equation are all distinct!

(*Stabs himself. Dies.*)

Space travellers are going to have to be very cautious, and feel their way carefully to avoid giving any offense to their hosts. It wouldn't do to go talking about having a bad cold if the Martians

are filterable viruses. It would be a mistake to use expressions like, "You fracture me," if they are intelligent crystals.

To begin with, our explorers should try to find the nearest equivalent to a news-stand even before asking to be taken to the President. A quick glance at the extraterrestrial version of *True Romances* may give a more comprehensive picture of their mores than any number of sessions with sociologists and anthropologists:

"Gkwill drew himself up to his full height—all .24 centimeters. His pseudopodia quivered.

"'Do you mean—?' he shrilled.

"'Yes!' he replied. He elongated himself and his nucleus divided.

"'You're beautiful,' he panted.

"Seizing himself by the cilia, he drew himself down to the couch. 'I love us,' he murmured."

It is clear that this sort of thing may lead to misunderstandings, to say nothing of trouble with the Johnson office.

Under the circumstances, a few brief rules for the use of future space travellers may be helpful:

1. Don't step on that thing—it may be sweethearts.

2. Once communication has been established, and you have learned the rudiments of the Martian language, don't put anything in writing.

3. The proper response when shown something with four tentacles is, "My, she *is* sweet, isn't she?"

4. Space ships have limited living space. Be courteous and considerate.

5. Under conditions of no-gravity you will always feel as though you're falling, so don't put anything in writing.

6. Don't take anything for granted. On Mars, the Eternal

Triangle may be a rectangle.

7. Outer Space has been kept clean for YOUR convenience. Let's keep it that way!

8. Express: only stops at Venus to take on passengers or Doctor Fanshaw.

9. It is virtually impossible to walk home from a space ship ride.

10. Every ounce of weight is a consideration in the design of interplanetary vehicles. Black lace underwear weighs almost nothing.

One thing is perfectly clear. Until this whole question is settled satisfactorily, they're not going to get me to go.



STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1938, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION of The Magazine of *Fantasy and Science Fiction*, published monthly at Concord, New Hampshire, for October 1, 1961.

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Ordinarily it is a great pleasure to be the Minister of Defense for the Terrana Hegemony—but even a Minister of Defense must make an occasional irreversible decision.

THE DEER PARK

by Maria Russell

THE DAY WAS A TENDER JOY OF green and gold, shot with flecks of blue that twinkled among the leaves of the tall old trees. The grass was long and soft (weaving itself into a carpet as proper grass should do) and the deer were warm shadows graciously drinking at the serene pool that lay at the end of the oaken tunnel. The Minister was very happy.

"It is," he said to his lovely companion, Ronde, "a great blessing to be the Minister of Defense for the Terrana Hegemony—for who else has as much time as I for such pleasant pursuits as these?"

Ronde agreeably dipped her flame-graced head, and squeezed the arm she held, just ever so little—just as she always did—to show that she was perfectly atune.

"It is," continued the Minister, "a grand and glorious blessing that the systems are so well protected, so well covered and concealed from whatever evil intelligences exist in the universe . . ."

"So well concealed from Nature," interposed Ronde. "How I hate the Old Ones! What nasty creatures!"

"And from the Old Ones," agreed the Minister, for, of course, Ronde had merely echoed his thoughts—thoughts which he had not yet had time nor inclination to express—echoed them just as she always did.

"And from Nature—that concatenation of the elder antagonists of man," he continued, "for, if such concealment were not the case, I should never have the opportunity to create or enjoy the dearest ideals of my heart." He was actually thinking of the deer park, but he pinched Ronde ever so slightly and gently, so that she could assume he was thinking of her. She squeezed his arm again. They were *perfectly* atune. But, after all, had he not created her?

They walked on, bending their steps into the winding footpaths, and stopping to fall upon a green

and leafy bed beneath one of the giant trees and indulge themselves for a moment, or for many minutes. Then they would rise, and continue their strolling, pausing here to stroke the antlers of a royal buck, or there to tickle the ears of a wistful doe and coo and chuckle over the reedy helplessness of a tiny fawn. The scene was altogether pastoral, altogether pleasant, altogether picturesque.

When they had encountered their third couch of leaves—or was it boughs, perhaps?—the Minister found himself slightly bored with so much indulgence, and Ronde, atune as always, rejected him with a slight push from her white hand and sat up, brushing her exquisitely milky brow with the same white hand, and petulantly waving the other.

"I think, Vwal," she breathed, "I would rather not—at the moment. I think, instead, I would prefer to see a she-lion, or some such grisly animal, attack one of the deer—a buck, of course, for the battle would not be excitingly equal if it were a doe. Do find a lioness for me, Vwal! Oh, do!"

She rose, searching among the far trees for the sight of the beast, for, of course, she knew that he could, would do that very thing.

The Minister felt a delicious pain slide through him like a razored knife. A struggle! How marvelous . . . he should have known that this most precious

puppet of his imagination would quite naturally discern the peak and crisis of satiation.

"No!" he cried, all outer sternness, all inner delight. "No, Ronde! how very immoral, how unethical of you! I will do no such thing!"

"Ah, please, dear, beautiful, most good Vwal!" Tears lept into her green eyes, and she clasped her little hands in a consummate attitude of supplication.

"Certainly not!" he said, calmer now, for he knew that he would consent, he knew the exact and fatal length to his endurance of this chasm in his being. It was an excellent and fantastic pleasure.

"Ah, Vwal," she murmured, sinking to her knees and clasping his, all in one graceful and generous movement, "I have never seen the frightful battle of these creatures, the torn flesh and the blood running, dripping on the greensward. I have never heard the cries of lust and terror, the piteous wailing of the wounded, felt the panic of the near-defeated. Let me know it, Vwal! Let me see, hear and feel!"

She pressed her supple body against his legs, and he was conscious of her breasts pleading with his tendons, her hands pleading with his thighs, her being—which was, of course, his own—pleading also. The pleasure boiled and bubbled, the pressure mounted, reaching the point of furtherest

containment, and, with a gasp of relief, he flashed the image in his mind into the qopot; the she-lion roared down on the buck. The battle was a classic specimen, and, in the end—as he had willed it—the buck victorious. The Minister was satisfied. He disliked cats of any description.

When quiet had at last settled down like a contented hen, the Minister looked around him, sensations of distaste tickling his brain. What is duller than a climax past and half-remembered?

"I believe," he said, "that I shall go to sleep." And he lay down on the last-encountered couch, and Ronde curled herself beside him, in the crook of his arm.

The Minister awoke some ten minutes later, his arm numbed from the weight of Ronde. He raised his head, and looked at her with an expression compounded of the previous sensations.

"Oh . . . disappear," he muttered, a little sulkily. She vanished as dew from the grass, but more swiftly. The Minister sighed, rolled over, and went back to sleep.

He was awakened again, this time in half an hour.

"Sire," burbled the little pink flame of his fama, "there's a committee of persons to see you."

Who on earth would want to see me? thought the Minister, though he was as yet half asleep

and really supposed that he must be dreaming still.

"Oh, no one on Earth, Sire," responded the fama with excruciating veracity. "These are very minor persons," it went on, answering with its usual alacrity the unformed queries in his mind, "from a very minor planet, from a very minor system—a one-time colony of Terra's. One has no idea what they want," it concluded with an apologetic flicker.

"Oh, dear," mumbled the Minister, "I suppose I should tidy up."

He directed another image to the qopot, and, as the cloth on his body smoothed itself free of dirt and wrinkles, so did the shreds and gobbets of the big cat carcass disappear and the grass fade from rusty crimson to its usual green. As an afterthought, the Minister reduced its hue to more nearly a springtime chartruese.

"Show them in," he said, feeling the need for a spoken command. He tried to move his arm in an appropriately languid fashion toward what he thought was the entrance to the park.

But the roseal extension of his senses had already fluttered away in the opposite direction, and the Minister was left alone to attempt an attitude of comfort on the familiar boughs. He nervously summoned Ronde. She appeared a trifle tentatively, a trifle timidly, as if not certain that she was wanted. The Minister wasn't cer-

tain, either. His fingers were still numb, and, besides, he almost wished for a mind other than his own to tender the support and courage necessary to cope with this bizarre situation. But Ronde was better than nothing.

The visitors intensified the wish by entering behind him. The Minister cursed his bad memory: he had forgotten that only the week before he had removed the gates of the deer park to the eastern wall, where they would open to the morning sun. Not that it mattered where he placed his sun, for doubtless a quadrillion fireballs spun beneath the mamiraj, but an innate sense of fitness caused him to create his private dawn always to the east. Unfortunately, now, he was facing west, and Ronde was the one to notice the appearance of the strangers.

"There they come, Vwal," she stated, and he followed the pointing of the slender limb, hand and outstretched finger. He was annoyed that she had seen them first, and he created a large strawberry mark on her wrist.

There were only five of them—four men, and their leader. A female. The Minister noted in distaste her pale hair, her lean and vital body, her confident stride. He decided that he disliked blondes.

The girl came straight towards him—tall as himself and nearly half as powerful. The Minister felt threatened, abused. He

watched her swing her shoulders—gracefully, he had to admit on second thought, though, of course, he much preferred the slink and sloven walk of Ronde.

And worse still, the girl had an insolent nose, and brilliantly blue eyes . . . eyes blue as the—yes, it *was* sky! For he'd always made his own canopy that lovely, frightening color. He drew his glance away from the girl in confusion.

"Sire," announced the fama, "these are the persons from the planet Zzzt, which circles the star Osborne 542—a star, one understands, of eighteenth magnitude or perhaps nineteenth."

"Eighteenth," said the pale-haired girl, "and the true name of our sun is 'Sol,' after our parent." She smiled at the Minister with friendly abandon. The Minister stared back with shaky enmity.

"It is a *very* minor planet," soothed the fama, with a placating flicker, "and the only child of the star Osborne 542. A very insignificant piece of cosmic dust. Even today, their world is not within the mamiraj."

"You're not sealed?" cried the Minister. "How terrible!"

The girl smiled again, raw energy flooding from those disturbing eyes beneath that sun-frothed hair.

"We don't find it terrible at all."

"But . . . you live in the open," whispered the Minister, "under the . . . sky . . ."

"Yes," answered the girl, with simple truthfulness.

"It is blue, isn't it?" asked the Minister, suddenly confronted with the possibility that his sense of fitness had not functioned with perfection during the thousand-odd years of his life. "It is . . . blue?"

"Yes," answered the girl, again. "As blue as the skies of Earth. Though, of course," she added, quickly, "none of us have ever seen the skies of Earth."

"Nor have I," said the Minister, stiffly, "but I understand they're blue."

"Sire," murmured the fama, "these persons have come to implore your aid."

"Oh?" queried the Minister, uncertainly. "Well . . . perhaps you'd better sit down."

The four men gratefully arranged themselves on stump and log and fountain-lip. The girl tailor-crossed herself on the ground before the Minister.

"Sire," she began, without more ado, "for aeons we have lived, a peaceful people, tilling the soil, tending the herds, rearing our children and dying in our turn. The ways of space and the universe have been forgotten, much to our sorrow. The ships that brought us to Zzzt have been allowed to rust, until all we had left was an old creaking can of a vessel. It managed to return us to the worlds of Terrana before it fell to pieces at

one tiny blast from the invader."

"Invader!" cried the Minister, shuddering at the thought of alien presence—which alien presence he could not have said—"well! such incidents are behind us, for we lie safe behind the mamiraj . . . as can the planet Zzzt."

"Sire," responded the girl, "Zzzt thanks you. But we require another type of assistance."

There was a pause—expectancy counterpoint to a basso of faint terror.

"What type?" mumbled the Minister, but before he got his answer, Ronde was on her feet, her eyes blazing with emerald fire, her hair a contrasting aurora around her white, drawn face.

"Whelps of death!" she cried. "They wish to live in the ancient way, to be suckled and spat upon by the Old Ones!"

The girl seemed unperturbed.

"How else to see the stars?" she asked.

"We see them," snarled Ronde, "any day or night we please, and if, at any given moment, we don't care for them, we snuff them out."

"What joy in that," asked the girl, "to look at stars that may be dismissed like a candle flame caught between thumb and forefinger?"

"The joy of art, creation, power . . . security . . ." answered Ronde, calmly, framing her words in a triumphant smile.

"Security is not a joy," said the

girl. "Security is a disease." She spoke very quietly, in the manner of one who is forced to utter a sad truth, which for the sake of politeness and pity were better left unsaid. She held her sight upward for a moment, staring at Ronde; then she looked at the Minister and smiled gently, once, and let her gaze drift downwards, across the pool and the lawn, until it rested on the ground in front of the Minister's feet. Ronde followed the sweep of vision to the end; then she turned her eyes to the Minister; they were the puzzled eyes of an antique child.

"You answer her, then," she said, pouting a little. "Well? Aren't you going to answer her?"

The Minister looked from one to the other for a long moment, listening painfully for the notes of the old harmony—his harmony, with its agreeably futile accidentals—and hearing only fantastic modulations far too potent for his comfort: strange sounds from a stranger's world. Suddenly, he put his hands over his ears; then he got down on his knees, and, with first his back and last his neck crooked at the necessary angle, he looked up at the girl.

"What type?" he repeated, and his voice rang cold and hollow—so hollow that it frightened him until he remembered that the palms of his hands were pressing a myriad molecules of air against his ear drums; he removed his

hands at once. "What type," he said again, and was relieved to note that his words sang in the air—this time thinly, and with but a slight tremble.

"Ships!" The girl spoke eagerly. "Ships of space, new and bright and ready for battle."

"We . . . we have no such antiques." The singing voice became dry and whispery, and he could not have said whether it was from relief or sorrow.

But she pursued—over the inch of distance between them.

"You built them once!" she cried. "You must retain the skill!"

He retreated three inches—desperately.

"We . . . we do not need it. The qopot will create whatever we hold in our minds." And his throat choked—too late—as his brain grasped the implication of his words and the sense of that daring that had lain so deep within him that he had never recognized it before.

But the girl seemed to discover not victory, but defeat. Sadly she shook her head.

"Who can hold such a thing as a ship in his mind?"

Unsought release from unwanted duality flooded the Minister like the white rain of hope. He stood up on his feet once more, and stared down at the top of the girl's bent head.

"Exactly!" he crowed. "You must have a toria, my dear child,

a toria! and I've got none—none at all. I mislaid my entire collection at least six hundred years ago. Or was it five?" he mused. "No difference, I've not got any, so I'm really quite afraid we can't help you."

"Goodbye," said Ronde, haughtily waving her hand. At the sound of her voice, the strange notes clanged again, and the Minister wished to call out, "Wait!" but he said nothing, though the girl was now gazing up at him, sadness dampening her eyes.

"Sire," said the fama, "here is the toria you desire."

"I desire?" cried the Minister, falling back a pace, and it was with shock he noted, in truth, a queer little thought at the edge of his mind—so queer, indeed, that he did not even think to question the fama as to the whereabouts of that adolescent mislaying.

"No!" shrieked Ronde, and the strangers got to their feet.

For a thin little firey line was already uncurling from the center of the hovering flame. It wound itself into the qopot and nestled, layer on layer, around a whirling spoke. The Minister went closer and watched in horrified fascination, and he was the last to notice the look of shining wonder that appeared on the face of the girl as she looked down the great tunnel of trees to the end of the park.

There, there at the very end of the lane, by the little pool, was a

pure loveliness, poised like a great silver butterfly or gleaming bird—a ghost of old, beckoning once again to the man that lived in the Minister. He took a step forward, and was surprised to find that the others did likewise, for they had all moved as one creature, drawn by the shimmering vision that seemed to dance in ecstasy at the water's edge.

Ronde whimpered once, and flung herself on the ground at the Minister's feet. He hardly glanced at her.

"Sire!" cried the girl, excitedly, "you've given us back our home!"

"I?" exclaimed the Minister, again. He was bewildered. What had he to do with that foreign thing caught from the little spinning reel in the qopot? Yet that tiny, odd thought was bobbing and bobbing around in his mind. He looked at the fama, almost as if for guidance.

"Their fleet awaits them," said the fama, "on the far planets, just as Your Honor wished."

The Minister did not protest this time, but only stared for a minute; then he turned on his heel, without another word, and left them.

"Thank you," whispered the girl, to no one in particular.

The Minister stood behind the bole of one of the larger oaks and watched their departure. He was not really looking at the girl, but at the sheen of her hair glittering

through the shadows of the trees.

"Gold as the . . . sun," he whispered, and he followed the shining strands until they disappeared behind the moonsilver of the little ship.

And he continued to stare at the ship, for now, he thought, it lay like a poor, captured thing in the deathly beautiful embrace of the pool and gardens—eager for flight, but frozen into stillness.

A sense of sorrow overwhelmed him, and he watched, while the deer came, and nuzzled and grazed and cropped, unafraid and careless, so sure were they of the stranger's tameness and timidity.

Many minutes passed, and finally the Minister walked over to Ronde where she lay on the ground. He looked down at her, contemplation patterning his face. Experimentally, he changed one curl of her head to a more golden hue. Then a quiver of disgust crossed his heart, and he changed it back. She opened one eye, then the other, and gazed up at him.

"Have they gone, Vwal?" she asked.

"Yes," he answered, dully, "they've gone."

"Good!" she cried, and leaped to her feet, as if from a make-believe sleep. "Dear Vwal," she murmured, as she fastened herself to his arm, "what terrible people those people were."

"Yes," agreed the Minister, still dully. He was looking at the ship.

"Vwal!" she cried. "Destroy it, quickly!"

"Why . . . I don't know if I can," he answered in a mild, deceptive voice.

"Try, try!" she urged, but he shook off her grasp and started for the ship as steel starts for a magnet—slowly at first, then more and more swiftly. Ronde stood for a moment still as eternity. Then she ran after him.

The Minister ran faster than she, and Ronde caught up with him only when he reached the ship.

"Vwal!"

He turned.

"I only want to look," he said.

"No!" Her hands were clawing at him, her body seeking to pull him away from the enemy. "You must not!"

He looked at her, his eyes gone wild and glad.

"Why must I not?" he cried, even as his hands found the secret of the entrance and the little ship, opened itself to his longing.

She answered nothing, but only stared at him with the green eyes of his coward soul. With a great cry, he leaped for her throat and tore the slender cylinder of snowy flesh to bits and pieces. She did not call out—not once—and he was amazed when once more she lay in the grass at his feet to find that his hands were not stained with blood. Somehow he had expected her to be complete.

"The battle was excitingly equal," he muttered to himself. It was an epitaph.

He pivoted, to enter the ship, but the flickering light of the fama caught his eyes. It was glowing with a harsher color, and seemed to be expanding before his very gaze.

And, as he stared at the fama, the queer little thought, dipping and rolling around in his mind, reached out, convulsively, for the knowledge of the fama—and the pink flame disappeared, sucked into the whirlpool that was the Minister.

Suddenly he was aware of a vision both within and without his skull, a vision of gigantic galaxies and entire universes—wonder on wonder, starry cloud on cloud, infinite on infinite. He found himself the focus of a tremendous pin-wheel of sensation, of desire for the sweet vastnesses of space.

The wheel spun faster and faster, and curiously appeared to condense toward a point before his mind, and the energy of his emotion directed itself straight through that point to the qopot. Swifter and swifter grew the impetus which was himself, forcing the qopot to destroy the mamiraj, to burst those bubbles which confined the worlds of the Hegemony. It seemed to the Minister that there should have been a noise of sorts, but there was no sound at all. Not even a gentle sigh, or breath of expiration.

He looked around him. The park was as it should be, a little dimmer, perhaps, for the sunlight seemed to be fading. The deer still grazed at the side of the ship, chocolate against green and silver.

"A dream," he whispered, "it was all a dream."

And then he saw the star, twinkling at the edge of a cloud. He did not know that the star was Venus, and the cloud frightened him, for he had never seen such a thing before.

But his brief fright deepened to a chill foreboding of still greater happenings. For the star, too, was fading, and not through any will of his own. And the deer park itself had a peculiar look. It seemed to grow transparent, and, through the incipient diaphaneity he could see the outlines of mountains, and these mountains seemed also pellucid, and beyond them were forests and mountains of that same strange clarity—glass rock on tree on rock, wavering and receding into the distance.

With a sudden burst of awful knowledge he looked down at his feet—and through them, through his pseudo-earth to its inspiration, and through them all into the stars and distances that should, by all rights, grace only the skies of the antipodes. He looked at his hands, his arms, his torso, and the veins and arteries and skeleton itself seemed faintly discernable through the cloth and flesh.

"What's happening?" he cried. "Ronde, Ronde!" She did not answer, but his own mind did. And he wondered how the Old Ones—the very life and rhythm of the cosmos—had tolerated these worlds of dream and shadow for so very long.

He sighed and sat down by Ronde, for there was really nothing else to do. He took up a lock of the rusty hair, and stroked it gently, and the brown deer came and snuffled at his hands, and he reached in his clothing for the bit of food which the deer were expecting. It was, he thought calmly, as solid as ever.

While the deer licked at his fingers, his eyes travelled the circuit of the dimming horizon, swept the sky in pursuit of the fading suns and their satellites, and his mind

observed, still calmly, that it had never known the boundaries of the Hegemony until this moment when they were only apparent by their swift disappearance.

The farthest reaches of the system seemed very faint now, but the deer park, strangely enough, remained clear in his vision. He watched in growing fascination as non-existence crept upon the mountains and the forest, crept closer and closer to the deer park, until at last there were only the oaks and the lawn and the gentle boughs and the little pool and benches, all glowing with a gay translucency, the whole wheeling and turning like a great room in empty space. He bent and kissed the strands of hair that lay across his palm, and waited for the darkness.



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Max Kearney—ad man, hobbyist in the occult, friend-in-need—returns in an adventure concerning a chap who has acquired the disconcerting habit of turning into an elephant on national holidays. That sort of thing plays hell with one's love life—how, after all, can you ask a girl to marry you if you know in advance that what you'll really want for Christmas is no more than a bale of hay . . . ?

PLEASE STAND BY

by Ron Goulart

THE ART DEPARTMENT SECRETARY put her Christmas tree down and kissed Max Kearny. "There's somebody to see you," she said, getting her coat the rest of the way on and picking up the tree again.

Max shifted on his stool. "On the last working day before Christmas?"

"Pile those packages in my arms," the secretary said. "He says it's an emergency."

Moving away from his drawing board Max arranged the gift packages in the girl's arms. "Who is it? A rep?"

"Somebody named Dan Padgett."

"Oh, sure. He's a friend of mine from another agency. Tell him to come on back."

"Will do. You'll have a nice Christmas, won't you, Max?"

"I think the Salvation Army has something nice planned."

"No, seriously, Max. Don't sit around some cold bar. Well, Merry Christmas."

"Same to you." Max looked at the rough layout on his board for a moment and then Dan Padgett came in. "Hi, Dan. What is it?"

Dan Padgett rubbed his palms together. "You still have your hobby?"

Max shook out a cigarette from his pack. "The ghost detective stuff? Sure."

"But you don't specialize in ghosts only?" Dan went around the room once, then closed the door.

"No. I'm interested in most of the occult field. The last case I worked on involved a freelance resurrectionist. Why?"

"You remember Anne Clemens, the blonde?"

"Yeah. You used to go out with her when we worked at Bryan-Josephs and Associates. Skinny girl."

"Slender. Fashion model type." Dan sat in the room's chair and unbuttoned his coat. "I want to marry her."

"Right now?"

"I asked her two weeks ago but she hasn't given me an answer yet. One reason is Kenneth Wester-land."

"The animator?"

"Yes. The guy who created Major Bowser. He's seeing Anne, too."

"Well," said Max, dragging his stool back from the drawing board. "I don't do lovelorn work, Dan. Now if Westerland were a vampire or a warlock I might be able to help."

"He's not the main problem. It's if Anne says yes."

"What is?"

"I can't marry her."

"Change of heart?"

"No." Dan tilted to his feet. "No." He rubbed his hands together. "No, I love her. The thing is there's something wrong with me. I hate to bother you so close to Christmas, but that's part of it."

Max lit a fresh cigarette from the old one. "I still don't have a clear idea of the problem, Dan."

"I change into an elephant on all national holidays."

Max leaned forward and squint-

ed one eye at Dan. "An elephant?"

"Middle sized grey elephant."

"On national holidays?"

"More or less. It started on Hal-loween. It didn't happen again till Thanksgiving. Fortunately I can talk during it and I was able to explain to my folks that I wouldn't get home for our traditional Thanksgiving get-together."

"How do you dial the phone?"

"I waited till they called me. You can pick up a phone with your trunk. I found that out."

"Usually people change into cats or wolves."

"I wouldn't mind that," Dan said, sitting. "A wolf, that's acceptable. It has a certain appeal. I'd even settle for a giant cockroach, for the symbolic value. But a middle sized grey elephant. I can't expect Anne to marry me when I do things like that."

"You don't think," said Max, crossing to the window and looking down at the late afternoon crowds, "that you're simply having hallucinations?"

"If I am they're pretty authentic. Thanksgiving day I ate a bale of hay." Dan tapped his fingers on his knees. "See, the first time I changed I got hungry after awhile. But I couldn't work the damned can opener with my trunk. So I figured I'd get a bale of hay and keep it handy if I ever changed again."

"You seemed to stay an elephant for how long?"

"Twenty four hours. The first time—both times I've been in my apartment, which has a nice solid floor—I got worried. I trumpeted and stomped around. Then the guy upstairs, the queer ceramacist, started pounding on the floor. I figured I'd better keep quiet so nobody would call the cops and take me off to a zoo or animal shelter. Well, I waited around and tried to figure things out and then right on the nose at midnight I was myself again."

Max ground his cigarette into the small metal pie plate on his workstand. "You're not putting me on, are you?"

"No, Max." Dan looked up hopefully. "Is this in your line? I don't know anyone else to ask. I tried to forget it. Now, though, Christmas is nearly here. Both other times I changed was on a holiday. I'm worried."

"Lycanthropy," said Max. "That can't be it. Have you been near any elephants lately?"

"I was out at the zoo a couple years ago. None of them bit me or even looked at me funny."

"This is something else. Look, Dan, I've got a date with a girl down in Palo Alto on Christmas day. But Christmas eve I can be free. Do you change right on the dot?"

"If it happens I should switch over right at midnight on the twenty-fourth. I already told my folks I was going to spend these

holidays with Anne. And I told her I'd be with them."

"Which leaves her free to see Westerland."

"That son of a bitch."

"Major Bowser's not a bad cartoon show."

"Successful anyway. That dog's voice is what makes the show. I hate Westerland and I've laughed at it." Dan rose. "Maybe nothing will happen."

"If anything does it may give me a lead."

"Hope so. Well, Merry Christmas, Max. See you tomorrow night."

Max nodded and Dan Padgett left. Leaning over his drawing board Max wrote *Hex?* on the margin of his layout.

He listened to the piped in music play Christmas carols for a few minutes and then started drawing again.

The bale of hay crackled as Max sat down on it. He lit a cigarette carefully and checked his watch again. "Half hour to go," he said.

Dan Padgett poured some scotch into a cup marked Tom & Jerry and closed the venetian blinds. "I felt silly carrying that bale of hay up here. People expect to see you with a tree this time of year."

"You could have hung tinsel on it."

"That'd hurt my fillings when I

eat the hay." Dan poured some more scotch and walked to the heater outlet. He kicked it once. "Getting cold in here. I'm afraid to complain to the landlady. She'd probably say—'Who else would let you keep an elephant in your rooms? A little chill you shouldn't mind.'"

"You know," said Max, "I've been reading up on lycanthropy. A friend of mine runs an occult book shop."

"Non-fiction seems to be doing better and better."

"There doesn't seem to be any recorded case of were-elephants."

"Maybe the others didn't want any publicity."

"Maybe. It's more likely somebody has put a spell on you. In that case you could change into most anything?"

Dan frowned. "I hadn't thought of that. What time is it?"

"Quarter to."

"A spell, huh? Would I have to meet the person who did it? Or is it done from a distance?"

"Usually there has to be some kind of contact."

"Say," said Dan, lowering his head and stroking his nose, "you'd better not sit on that bale of hay. Animals don't like people fooling with their food." He was standing with his feet wide apart, his legs stiff.

Max carefully got up and moved back across the room. "Something?"

"No," said Dan. He leaned far forward, reaching for the floor with his hands. "I just have an itch. My stomach."

Max watched as Dan scratched his stomach with his trunk. "Damn."

Raising his head the middle sized grey elephant squinted at Max. "Hell, I thought it wouldn't happen again."

"Can I come closer."

Dan beckoned with his trunk. "I won't trample you."

Max reached out and touched the side of the elephant. "You're a real elephant sure enough."

"I should have thought to get some cabbages, too. This stuff is pretty bland." He was tearing trunkfuls of hay from the bale and stuffing them into his mouth.

Max remembered the cigarette in his hand and lit it. He walked twice around the elephant and said, "Think back now, Dan. To the first time this happened. When was it?"

"I told you. Halloween."

"But that's not really a holiday. Was it the day after Halloween. Or the night itself?"

"Wait. It was before. It was the day after the party at Eando Carawan's. In the Beach."

"Where?"

"North Beach. There was a party. Anne knows Eando's wife. Her name is Eando, too."

"Why?"

"His name is Ernest and hers is

Olivia. E-and-O. So they both call themselves Eando. They paint those pictures of bug-eyed children you can buy in all the stores down there. You should know them, being an artist yourself."

Max grunted. "Ernie Carawan. Sure, he used to be a freelance artist, specializing in dogs. We stopped using him because all his dogs started having bug-eyes."

"You ought to see Olivia."

"What happened at the party?"

"Well," said Dan, tearing off more hay, "I get the idea that there was some guy at this party. A little round fat guy. About your height. Around thirty five. Somebody said he was a stage magician or something."

"Come on," said Max, "elephant's are supposed to have good memories."

"I think I was sort of drunk at the time. I can't remember all he said. Something about doing me a favor. And a flash."

"A flash?"

"The flash came to him like that. It told him to—to do whatever he did." Dan stopped eating the hay. "That would be magic, though, Max. That's impossible."

"Shut up and eat your hay. Anything is possible."

"You're right. Who'd have thought I'd be spending Christmas as an elephant."

"That magician for one," said Max. "What's his name? He may know something."

"His name?"

"That's right."

"I don't know. He didn't tell me."

"Just came up and put a spell on you."

"You know how it is at parties."

Max found the phone on a black table near the bookshelves. "Where's the phone book?"

"Oh, yeah."

"What?"

"It's not here. The last time I was an elephant I ate it."

"I'll get Carawan's number from information and see if he knows who this wizard is."

Carawan didn't. But someone at his Christmas Eve party did. The magician ran a sandal shop in North Beach. His name was Claude Waller. As far as anyone knew he was visiting his ex-wife in Los Angeles for Christmas and wouldn't be back until Monday or Tuesday.

Max reached for the price tag on a pair of orange leather slippers. The beaded screen at the back of the shop clattered.

"You a fagot or something, buddy?" asked the heavy-set man who came into the room.

"No, sir. Sorry."

"Then you don't want that pair of slippers. That's my fagot special. Also comes in light green. Who are you?"

"Max Kearny. Are you Claude Waller?"

Waller was wearing a loose brown suit. He unbuttoned the coat and sat down on a stool in front of the counter. "That's who I am. The little old shoemaker."

Max nodded.

"That's a switch on the wine commercial with the little old winemaker."

"I know."

"My humor always bombs. It's like my life. A big bomb. What do you want?"

"I hear you're a magician."

"No."

"You aren't?"

"Not anymore. My ex-wife, that flat-chested bitch, and I have reunited. I don't know what happened. I'm a tough guy. I don't take any crap."

"I'd say so."

"Then why'd I send her 200 bucks to come up here?"

"Is there time to stop the check?"

"I sent cash."

"You're stuck then I guess."

"She's not that bad."

"Do you know a guy named Dan Padgett?"

"No."

"How about Ernie Carawan?"

"Eando? Yeah."

"On Halloween you met Dan Padgett and a girl named Anne Clemens at the party the Carawans gave."

"That's a good act. Can you tell me what it says on the slip of paper in my pocket?"

"Do you remember talking to Dan? Could you have put some kind of spell on him?"

Waller slid forward off the stool. "That guy. I'll be damned. I did do it then."

"Do what?"

"I was whacked out of my mind. Juiced out of my skull, you know. I got this flash. Some guy was in trouble. This Padgett it was. I didn't think I'd really done anything. Did I?"

"He turns into an elephant on national holidays."

Waller looked at his feet. Then laughed. "He does. That's great. Why'd I do that do you suppose."

"Tell me."

Waller stopped laughing. "I get these flashes all the time. It bugs my wife. She doesn't know who to sleep with. I might get a flash about it. Wait now." He picked up a hammer from his workbench and tapped the palm of his hand. "That girl. The blonde girl. What's her name?"

"Anne Clemens."

"There's something. Trouble. Has it happened yet?"

"What's supposed to happen?"

"Ouch," said Waller. He'd brought the hammer down hard enough to start a bruise. "I can't remember. But I know I put a spell on your friend so he could save her when the time came."

Max lit a cigarette. "It would be simpler just to tell us what sort of trouble is coming."

Waller reached out behind him to set the hammer down. He missed the bench and the hammer smashed through the top of a shoe box. "Look, Kearny. I'm not a professional wizard. It's like in baseball. Sometimes a guy's just a natural. That's the way I am. A natural. I'm sorry, buddy. I can't tell you anything else. And I can't take that spell off your friend. I don't even remember how I did it."

"There's nothing else you can remember about what kind of trouble Anne is going to have?"

Frowning, Waller said, "Dogs. A pack of dogs. Dogs barking in the rain. No, that's not right. I can't get it. I don't know. This Dan Padgett will save her." Waller bent to pick up the hammer. "I'm pretty sure of that."

"This is Tuesday. On Saturday he's due to change again. Will the trouble come on New Year's Eve?"

"Buddy, if I get another flash I'll let you know."

At the door Max said, "I'll give you my number."

"Skip it," said Waller. "When I need it, I'll know it."

The door of the old Victorian house buzzed and Max caught the door knob and turned it. The stairway leading upstairs was lined with brown paintings of little girls with ponies and dogs. The light from the door opening upstairs flashed down across the bright gilt

frames on which eagles and flowers twisted and curled together.

"Max Kearny?" said Anne Clemens over the stair railing.

"Hi, Anne. Are you busy?"

"Not at the moment. I'm going out later. I just got home from work a little while ago."

This was Wednesday night. Max hadn't been able to find Anne at home until now. "I was driving by and I thought I'd stop."

"It's been several months since we've seen each other," said the girl as Max reached the doorway to her apartment. "Come in."

She was wearing a white blouse and what looked like a pair of black leotards. She wasn't as thin as Max had remembered. Her blonde hair was held back with a thin black ribbon.

"I won't hold you up?" Max asked.

Anne shook her head. "I won't have to start getting ready for awhile yet."

"Fine." Max got out his cigarettes and sat down in the old sofa chair Anne gestured at.

"Is it something about Dan, Max?" The single overhead light was soft and it touched her hair gently.

"In a way."

"Is it some trouble?" She was sitting opposite Max, straight up on the sofa bed.

"No," said Max. "Dan's got the idea, though, that you might be in trouble of some sort."

The girl moistened her lips. "Dan's too sensitive in some areas. I think I know what he means."

Max held his pack of cigarettes to her.

"No, thanks. Dan's worried about Ken Westerland, isn't he?"

"That's part of it."

"Max," said Anne, "I worked for Ken a couple of years ago. We've gone out off and on since then. Dan shouldn't worry about that."

"Westerland isn't causing you any trouble?"

"Ken? Of course not. If I seem hesitant to Dan it's only that I don't want Ken to be hurt either." She frowned, turning away. She turned back to Max and studied him as though he had suddenly appeared across from her. "What was I saying? Well, never mind. I really should be getting ready."

"If you need anything," said Max, "let me know."

"What?"

"I said that—"

"Oh, yes. If I need anything. Fine. If I'm going to dinner I should get started."

"You studying modern dance?"

Anne opened the door. "The leotards. No. They're comfortable. I don't have any show business leanings." She smiled quickly. "Thank you for dropping by, Max."

The door closed and he was in the hall. Max stood there long enough to light a cigarette and

then went downstairs and outside.

It was dark now. The street lights were on and the night cold was coming. Max got in his car and sat back, watching the front steps of Anne's building across the street. Next to his car was a narrow empty lot, high with dark grass. A house had been there once and when it was torn down the stone stairs had been left. Max' eyes went up, stopping in nothing beyond the last step. Shaking his head and lighting a new cigarette he turned to watch Anne's apartment house.

The front of the building was covered with yards and yards of white wooden gingerbread. It wound around and around the house. There was a wide porch across the building front. One with a peaked roof over it.

About an hour later Kenneth Westerland parked his grey Mercedes sedan at the corner. He was a tall thin man of about thirty-five. He had a fat man's face, too round and plump-cheeked for his body. He was carrying a small suitcase.

After Westerland had gone inside Max left his car and walked casually to the corner. He crossed the street. He stepped suddenly across a lawn and into the row of darkness alongside Anne's building. Using a garbage can to stand on Max pulled himself up onto the first landing of the fire escape with out use of the noisy ladder.

Max sat on the fire escape rail and, concealing the match flame, lit a cigarette. When he'd finished smoking it he ground out the butt against the ladder. Then he swung out around the edge of the building and onto the top of the porch roof. Flat on his stomach he worked up the slight incline. In a profusion of ivy and hollyhock Max concealed himself and let his left eye look up into the window.

This was the window of her living room and he could see Anne sitting in the chair he'd been sitting in. She was wearing a black cocktail dress now and her hair was down, touching her shoulders. She was watching Westerland. The suitcase was sitting on the rug between Max and the animator.

Westerland had a silver chain held between his thumb and forefinger. On the end of the chain a bright silver medallion spun.

Max blinked and ducked back into the vines. Westerland was hypnotizing Anne. It was like an illustration from a pulp magazine.

Looking in again Max saw Westerland let the medallion drop into his suit pocket. Westerland came toward the window and Max eased down.

After a moment he looked in. Westerland had opened the suitcase. It held a tape recorder. The mike was in Anne's hand. In her other hand she held several stapled together sheets of paper.

Westerland pushed her coffee

table in front of Anne and she set the papers on it. Her eyes seemed focused still on the spot where the spinning disc had been.

On his knees by the tape machine Westerland fitted on a spool of tape. After speaking a few words into the mike he gave it back to the girl. They began recording what had to be a script of some kind.

From the way Westerland used his face he was doing different voices. Anne's expression never changed as she spoke. Max couldn't hear anything.

Letting himself go flat he slid back to the edge of the old house and swung onto the fire escape. He waited to make sure no one had seen him and went to work on the window that led to the escape. It wasn't much work because there was no lock on it. It hadn't been opened for quite awhile and it creaked. Max stepped into the hall and closed the window. Then he went slowly to the door of Anne's apartment and put his ear against it.

He could hear the voices faintly now. Westerland speaking as various characters. Anne using only one voice, not her own. Max sensed something behind him and turned to see the door of the next apartment opening. A big girl with black rimmed glasses was looking at him.

"What is it?" she said.

Max smiled and came up to her

door. "Nobody home I guess. Perhaps you'd like to subscribe to the Seditionist Daily. If I sell eight more subscriptions I get a stuffed panda."

The girl poked her chin. "A panda? A grown man like you shouldn't want a stuffed panda."

Max watched her for a second. "It is sort of foolish. To hell with them then. It's not much of a paper anyway. No comics and only fifteen words in the crossword puzzle. Good night, miss. Sorry to bother you. You've opened my eyes." He went down the stairs as the door closed behind him.

What he'd learned tonight gave him no clues as to Dan's problem. But it was interesting. For some reason Anne Clemens was the voice of Westerland's animated cartoon character, Major Bowser.

By Friday Max had found out that Westerland had once worked in night clubs as a hypnotist. That gave him no leads about why Dan Padgett periodically turned into an elephant.

Early in the afternoon Dan called him. "Max. Something's wrong."

"Have you changed already?"

"No, I'm okay. But I can't find Anne."

"What do you mean?"

"She hasn't showed up at work today. And I can't get an answer at her place."

"Did you tell her about Wester-

land. About what I found out the other night?"

"I know you said not to. But you also said I was due to save her from some trouble. I thought maybe telling her about Westerland was the way to do it."

"You're supposed to save her while you're an elephant. Damn it. I didn't want her to know what Westerland was doing yet."

"If it's any help Anne didn't know she was Major Bowser. And she thinks she went to dinner with Westerland on Wednesday."

"No wonder she's so skinny. Okay. What else did she say?"

"She thought I was kidding. Then she seemed to become convinced. Even asked me how much Westerland probably made off the series."

"Great," said Max, making heavy lines on his memo pad. "Now she's probably gone to him and asked him for her back salary or something."

"Is that so bad?"

"We don't know." Max looked at his watch. "I can take off right now. I'll go out to her place and look around. Then check at Westerland's apartment. He lives out on California Street. I'll call you as soon as I find out anything."

"In the meantime," said Dan, "I'd better see about getting another bale of hay."

There was no lead on Anne's whereabouts at her apartment,

which Max broke into. Or at Westerland's, where he came in through the skylight.

At noon on Sautrday Max was wondering if he should sit back and trust to Waller's prediction that Dan would save Anne when the time came.

He lit a new cigarette and wandered around his apartment. He looked through quite a few of the occult books he'd collected.

The phone rang.

"Yes?"

"This is Waller's Sandal Shop."

"The magician?"

"Right, buddy. That is you, Kearny?"

"Yes. What's happening?"

"I got a flash."

"So?"

"Go to Sausalito."

"And?"

"That's all the flash told me. You and your friend get over to Sausalito. Today. Before midnight."

"You haven't got any more details?"

"Sorry. My ex-wife got in last night and I've been too unsettled to get any full scale flashes." The line went dead.

"Sausalito?" said Dan when Max called him.

"That's what Waller says."

"Hey," said Dan. "Westerland's ex-wife."

"He's got one, too?"

"His wife had a place over there. I remember going to a party

with Anne there once. Before Westerland got divorced. Could Anne be there?"

"Wouldn't Mrs. Westerland complain?"

"No, she's in Europe. It was in Herb Caen and—Max! The house would be empty now. Anne must be there. And in trouble."

The house was far back from the road that ran up through the low hills of Sausalito, the town just across the Golden Gate Bridge from San Francisco. It was a flat scattered house of redwood and glass.

Max and Dan had driven by it and parked the car. Max in the lead, they came downhill through a stretch of trees, descending toward the back of the Westerland house. It was late afternoon now and the great flat windows sparkled and went black and sparkled again as they came near. A high hedge circled the patio and when Max and Dan came close their view of the house was cut off.

"Think she's here?" Dan asked.

"We should be able to spot some signs of life," Max said. "I'm turning into a first class peeping tom. All I do is watch people's houses."

"I guess detective work's like that," said Dan. "Even the occult stuff."

"Hold it," said Max. "Listen."

"To what?"

"I heard a dog barking."

"In the house?"

"Yep."

"Means there's somebody in there."

"It means Anne's in there probably. Pretty sure that was Major Bowser."

"Hi, pals," said a high-pitched voice.

"Hello," said Max, turning to face the wide bald man behind them.

"Geese Louise," the man said, pointing his police special at them, "this sure saves me a lot of work. The boss had me out looking for you all day. And just when I was giving up and coming back here with my tail between my legs—well, here you are."

"Who's your boss?"

"Him. Westerland. I'm a full-time pro gunman. Hired to get you."

"You got us," said Max.

"Look, would you let me tell him I caught you over in Frisco? Makes me seem more efficient."

"We will," said Max, "If you'll let us go. Tell him we used karate on you. We can even break your arm to make it look good."

"No," said the bald man. "Let it pass. You guys want too many concessions. Go on inside."

Westerland was opening the refrigerator when his gunman brought Max and Dan into the kitchen.

"You brought it off Lloyd," said Westerland, taking a popsicle from the freezer compartment.

"I studied those pictures you gave me."

"Where's Anne?" Dan asked.

Westerland squeezed the wrapper off the popsicle. "Here. We've only this minute finished a recording session. Sit down."

When the four of them were around the white wooden table Westerland said, "You, Mr. Kearny."

Max took out his pack of cigarettes and put them on the table in front of him. "Sir?"

"Your detective work will be the ruin of you."

"All I did was look through a few windows. It's more acrobatics than detection."

"Never the less, you're on to me. Your over protective attitude toward Miss Clemens has caused you to stumble on one of the most closely guarded secrets of the entertainment industry."

"You mean Anne's being the voice of Major Bowser?"

"Exactly," said Westerland, his round cheeks caving as he sucked the popsicle. "But it's too late. Residuals and re-runs."

Dan tapped the table top. "What's that mean?"

"What else? I've completed taping the soundtrack for episode 78 of Major Boswer. I have a new series in the works. Within a few months the major will be released to secondary markets. That means I don't need Anne Clemens anymore."

Dan clenched his fist. "So let her go."

"Why did you ever need her?" Max asked, looking at Westerland.

"She's an unconscious talent," said Westerland, catching the last fragment of popsicle off the stick. "She first did that voice one night over two years ago. After a party I'd taken her to. She'd had too much to drink. I thought it was funny. The next day she'd forgotten about it. Couldn't even remember the voice. Instead of pressing her I used my hypnotic ability. I had a whole sketch book full of drawings of that damned dog. The voice clicked. It matched. I used it."

"And made \$100,000," said Dan.

"The writing is mine. And quite a bit of the drawing."

"And now?" said Max.

"She knows about it. She has thoughts of marrying and settling down. She asked me if \$5,000 would be a fair share of the profits from the major."

"Is that scale for 78 shows?" Max said.

"I could look it up," said Westerland. He was at the refrigerator again. "Lemon, lime, grape, watermelon. How's grape sound? Fine. Grape it is." He stood at the head of the table and unwrapped the purple popsicle. "I've come up with an alternative. I intend to eliminate all of you. Much cheaper way of settling things."

"You're kidding," said Dan.

"Animators are supposed to be lovable guys like Walt Disney," said Max.

"I'm a business man first. I can't use Anne Clemens anymore. We'll fix her first and you two at some later date. Lloyd, put these detectives in the cellar and lock it up."

Lloyd grinned and pointed to a door beyond the stove. Max and Dan were made to go down a long flight of wooden stairs and into a room that was filled with the smell of old newspapers and unused furniture. There were small dusty windows high up around the beamed ceiling.

"Not a very tough cellar," Dan whispered to Max.

"But you won't be staying here," said Lloyd. He kept his gun aimed at them and stepped around a fallen tricycle to a wide oak door in the cement wall. A padlock and chain hung down from a hook on the wall. Lloyd slid the bolt and opened the door. "The wine cellar. He showed it to me this morning. No wine left, but it's homey. You'll come to like it."

He got them inside and bolted the door. The chains rattled and the padlock snapped.

Max blinked. He lit a match and looked around the cement room. It was about twelve feet high and ten feet wide.

Dan made his way to an old cobbler's bench in the corner. "Does your watch glow in the

dark?" he asked as the match went out.

"It's five thirty."

"The magician was right. We're in trouble."

"I'm wondering," said Max, striking another match.

"You're wondering what that son of a bitch is going to do to Anne."

"Yes," Max said, spotting an empty wine barrel. He turned it upside down and sat on it.

"And what'll he do with us?"

Max started a cigarette from the dying match flames. "Drop gas pellets through the ceiling, fill the room with water, make the walls squeeze in."

"Westerland's trickier than that. He'll probably hypnotize us into thinking we're pheasants and then turn us loose the day the hunting season opens."

"Wonder how Lloyd knew what we looked like."

"Anne's got my picture in her purse. And one I think we all took at some beach party once."

Max leaned back against the dark wall. "This is about a middle sized room, isn't it?"

"I don't know. The only architecture course I took at school was in water color painting."

"In six hours you'll be a middle sized elephant."

Dan's bench clattered. "You think this is it?"

"Should be. How else are we going to get out of here?"

"I smash the door like a real elephant would." He snapped his fingers. "That's great."

"You should be able to do it."

"But Max?"

"Yeah?"

"Suppose I don't change?"

"You will."

"We only have the word of an alcoholic shoemaker."

"He knew about Sausalito."

"He could be a fink."

"He's a real magician. You're proof of that."

"Max?"

"Huh?"

"Maybe Westerland hypnotized us into thinking I was an elephant."

"How could he hypnotize me? I haven't seen him for years."

"He could hypnotize you and then make you forget you were."

"Dan," said Max, "relax. After midnight if we're still in here we can think up excuses."

"How do we know he won't harm Anne before midnight."

"We don't."

"Let's try to break out now."

Max lit a match and stood up. "I don't think these barrel staves will do it. See anything else?"

"Legs off this bench. We can unscrew them and bang the door down."

They got the wooden legs loose and taking one each began hammering at the bolt with them.

After a few minutes a voice echoed in. "Stop that ruckus."

"Screw you," said Dan.

"Wait now," said Westerland's voice. "You can't break down the door. And even if you could Lloyd would shoot you. I'm sending him down to sit guard. Last night at Playland he won four Betty Boop dolls at the shooting gallery. Be rational."

"How come we can hear you?"

"I'm talking through an air vent."

"Where's Anne?" shouted Dan.

"Still in a trance. If you behave I may let her bark for you before we leave."

"You bastard."

Max found Dan in the dark and caught his arm. "Take it easy." Raising his voice he said, "Westerland, how long do we stay down here?"

"Well, my ex-wife will be in Rome until next April. I hope to have a plan worked out by then. At the moment, however, I can't spare the time. I have to get ready for the party."

"What party?"

"The New Year's Eve party at the Leversons'. It's the one where Anne Clemens will drink too much."

"What?"

"She'll drink too much and get the idea she's an acrobat. She'll borrow a car and drive to the Golden Gate Bridge. While trying out her act on the top rail she'll discover she's not an acrobat at all and actually has a severe dread

of heights. When I hear about it I'll still be at the Leversons' party. I'll be saddened that she was able to see so little of the New Year."

"You can't make her do that. Hypnotism doesn't work that way."

"That's what you say now, Padgett. In the morning I'll have Lloyd slip the papers under the door."

The pipe stopped talking.

Dan slammed his fist into the cement wall. "He can't do it."

"Who are the Leversons?"

Dan was silent for a moment. "Leverson. Joe and Jackie. Isn't that the art director at BBDO? He and his wife live over here. Just up from Sally Stanford's restaurant. It could be them."

"It's a long way to midnight," said Max. "But I have a feeling we'll make it."

"We have to save Anne," said Dan, "and there doesn't seem to be anything to do but wait."

"What's the damn time, Max?"

"Six thirty."

"Must be nearly eight by now."

"Seven fifteen."

"I think I still hear them up there."

"Now?"

"Little after nine."

"Only ten? Is that watch going?"

"Yeah, it's ticking."

"Eleven yet, Max?"

"In five minutes."

"They've gone I'm sure."

"Relax."

"Look," said Dan, when Max told him it was a quarter to twelve, "I don't want to step on you if I change."

"I'll duck down on the floor by your feet. Your present feet. Then when you've changed I should be under your stomach."

"Okay. After I do you hop on my back."

At five to twelve Max sat down on the stone floor. "Happy New Year."

Dan's feet shuffled, moved further apart. "My stomach is starting to itch."

Max ducked a little. In the darkness a darker shadow seemed to grow overhead. "Dan?"

"I did it, Max." Dan laughed. "I did it right on time."

Max edged up and climbed on top of the elephant. "I'm aboard."

"Hang on. I'm going to push the door with my head."

Max hung on and waited. The door creaked and began to give.

"Watch it, you guys!" shouted Lloyd from outside.

"Trumpet at him," said Max.

"Good idea." Dan gave a violent angry elephant roar.

"Jesus!" Lloyd said.

The door exploded out and Dan's trunk slapped Lloyd into the side of the furnace. His gun

sailed into a clothes basket. Max jumped down and retrieved it.

"Go away," he said to Lloyd.

Lloyd blew his nose. "What kind of prank is this?"

"If he doesn't go," said Max, "trample him."

"Let's trample him no matter what," said Dan.

Lloyd left.

"Hell," said Dan. "How do I get up those stairs?"

"You don't," said Max, pointing. "See there, behind that stack of papers. A door. I'll see if it's open."

"Who cares. I'll push it open."

"Okay. I'll go find a phonebook and look up Leversons. Meet you in the patio."

Dan trumpeted and Max ran up the narrow wooden stairs.

The elephant careened down the grassy hillside. All around now New Year's horns were sounding.

"Only two Leversons, huh?" Dan asked again.

"It's most likely the art director. He's nearest the bridge."

They came out on Bridgeway, which ran along the water.

Dan trumpeted cars and people out of the way and Max ducked down, holding onto the big elephant ears.

They turned as the road curved and headed them for the Leverson home. "It better be this one," Dan said.

The old two story house was filled with lighted windows, the

windows spotted with people. "A party sure enough," said Max.

In the long twisted driveway a motor started. "A car," said Dan, running up the gravel.

Max jumped free as Dan made himself a road block in the driveway.

Red tail lights tinted the exhaust of a small grey jaguar convertible. Max ran to the car. Anne Clemens jerked the wheel and spun it. Max dived over the back of the car and, teetering on his stomach, jerked the ignition key off and out. Anne kept turning the wheel.

Max caught her by the shoulders, swung around off the car and pulled her up so that she was now kneeling in the driver's seat.

The girl shook her head twice, looking beyond Max.

He got the door open and helped her out. The gravel seemed to slide away from them in all directions.

"Duck," yelled Dan, still an elephant.

Max didn't turn. He dropped, pulling the girl with him.

A shot smashed a cobweb pattern across the windshield.

"You've spoiled it for sure," cried Westerland. "You and your silly damn elephant have spoiled my plan for sure."

The parking area lights were on and a circle of people was forming behind Westerland. He was standing twenty feet away from Max and Anne.

Then he fell over as Dan's trunk flipped his gun away from him.

Dan caught up the fallen animator and shook him.

Max got Anne to her feet and held onto her. "Bring her out of this, Westerland."

"In a pig's valise."

Dan tossed him up and caught him.

"Come on."

"Since you're so belligerent," said Westerland. "Dangle me closer to her."

Max had Lloyd's gun in his coat pocket. He took it out now and pointed it up at the swinging Westerland. "No wise stuff."

Westerland snapped his fingers near Anne's pale face.

She shivered once and fell against Max. He put his arms under hers and held her.

Dan suddenly dropped Westerland and, trumpeting once at the silent guests, galloped away into the night.

As his trumpet faded a siren filled the night.

"Real detectives," said Max.

Both Anne and Westerland were out. The guests were too far away to hear him.

A bush crackled behind him and Max turned his head.

Dan, himself again, came up to them. "Would it be okay if I held Anne?"

Max carefully transferred her. "She should be fine when she comes to."

"What'll we tell the law?"

"The truth. Except for the elephant."

"How'd we get from his place here?"

"My car wouldn't start. We figured he'd tampered with it. We hailed a passing motorist who dropped us here."

"People saw the elephant."

"It escaped from a zoo."

"What zoo?"

"Look," said Max, dropping the gun back into his pocket, "don't be so practical about this. We don't have to explain it. Okay?"

"Okay. Thanks, Max."

Max lit a cigarette.

"I changed back in only an hour. I don't think it will happen again, Max. Do you?"

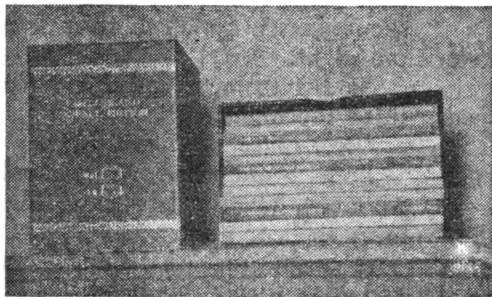
"If it would make you feel any better I'll spend the night before Lincoln's Birthday with you and Anne."

"How about Ground Hog's Day?"

"How about what?" said Anne. She looked up at Dan. "Dan? What is it?"

"Nothing much. A little trouble with Westerland. I'll explain."

Max nodded at them and went up the driveway to meet the approaching police. Somewhere in the night a final New Year's horn sounded.



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Once more the Good Doctor contributes his little bit to the increase of entropy, and, lower lip steady, we find ourselves unreasonably granting him the right to do so. . . . Among other, more interesting things, he explains a long-range advantage of dropping the bombs as soon as possible, if they are to be dropped at all.

THE MODERN DEMONOLOGY

by Isaac Asimov

YOU WOULD THINK, CONSIDERING MY BACKGROUND, THAT ANY time I had ever so slight a chance to drag fantasy into any serious discussion of science, I would at once do so with neon lights flashing and fireworks blasting.

Imagine my chagrin, then, when it turned out that I had spent a whole article on a discussion of entropy (see "Order! Order!," F&SF, February, 1961) and totally ignored the most famous single bit of fantasy in the history of science.

The omission was pointed out to me through the agency of a kind letter from what surely must be the Gentlest of all possible Readers; one that expressed very tactful surprise that I had managed to discuss the subject without mentioning Maxwell's demon.

Alas, I am contrite, and I shall now correct my error—and at considerable length.

When a hot body comes into contact with a cold body, heat flows

spontaneously from the hot one to the cold one and the two bodies finally come to an equilibrium temperature at some intermediate level. This is one aspect of the inevitable increase of entropy in all spontaneous processes involving a closed system. (I have the almost unbearable temptation to explain myself further by repeating everything in "Order! Order!" but am just managing not to. I shall, instead, assume that you have read the article and remember every burning word of it.)

In the early 19th century, the popular view was to consider heat a fluid that moved from hot to cold as a stone would fall from high to low. Once a stone was at the valley bottom, it moved no more. In the same way once the two bodies reached temperature equilibrium, there could be no further heat-flow under any circumstances.

In the mid-19th Century, however, the Scottish mathematician, James Clerk Maxwell, adopted the view that temperature was the measure of the average kinetic energy of the particles of a system. The particles of a hot body moved (on the average) more rapidly than did the particles of a cold body. When such bodies were in contact, the energies were redistributed. On the whole, the most probable redistribution was for the fast particles to lose velocity (and, therefore, kinetic energy) and the slow particles to gain it. In the end, the average velocity would be the same in both bodies and would be at some intermediate level.

In the case of this particle-in-motion theory, it *was* conceivable for heat flow to continue after equilibrium had been reached.

Imagine, for instance, two containers of gas connected by a narrow passage. The entire system is at an equilibrium temperature. That is, the average energy of the molecules in any one sizable portion of it (a portion large enough to be visible in an ordinary microscope) is the same as that in any other sizable portion.

This doesn't mean that the energies of all individual molecules are equal. There are some fast ones, some very fast ones, some very very fast ones. There are also some slow ones, some very slow ones and some very very slow ones. However, they all move about higgledy-piggledy and keep themselves well scrambled. Moreover, they are also colliding among themselves millions of times a second so that the velocities and energies of any one molecule are constantly changing, anyway. Therefore, any sizable portion of the gas has its fair share of both fast and slow molecules and ends with the same temperature as any other sizable portion.

However, what if—just as a matter of chance—a number of high-energy molecules happened to move through the connecting passage-way from right to left while a number of low-energy molecules hap-

pened to move through from left to right. The left container would then grow hot and the right container cold (though the average temperature overall would remain the same). A heat-flow would be set up despite equilibrium and entropy would decrease.

Now there is a certain infinitesimal chance, unimaginably close to zero, that this would happen through the mere random motion of molecules. The difference between "zero" and "almost-almost-almost-zero" is negligible in practice, but tremendous from the standpoint of theory; for the chance of heat-flow at equilibrium is zero in the fluid theory and almost-almost-almost-zero in the particle-in-motion theory.

Maxwell had to find some dramatic way to emphasize this difference to the general public.

Imagine, said Maxwell, that a tiny demon sat near the passage connecting the two containers of gas. Suppose he let fast molecules pass through from right to left but not vice versa. And suppose he let slow molecules through from left to right but not vice versa. In this way, fast molecules would accumulate in the left and slow ones in the right. The left half would grow hot and the right cold. Entropy would be reversed.

The demon, however, would be helpless if heat were a continuous fluid—and in this way Maxwell successfully dramatized the difference in theories.

Maxwell's demon also dramatized the possibility of escaping from the dreadful inevitability of entropy increase. As I explained in "Order! Order!" increasing entropy implies increasing disorder; a running down; a using up.

If entropy must constantly and continuously increase, then the universe is remorselessly running down, thus setting a limit (a long one, to be sure) on the existence of humanity. To some human beings, this ultimate end poses itself almost as a threat to their personal immortality; or as a denial of the omnipotence of God. There is, therefore, a strong emotional urge to deny that entropy *must* increase.

And in Maxwell's demon, they find substance for their denial. To be sure, the demon does not exist, but his essential attribute is his capacity to pick and choose among the moving molecules. Mankind's scientific ability is constantly increasing and the day may come when he will be able, by some device, to duplicate the demon's function. Would he then not be able to decrease entropy?

Alas, there is a flaw in the argument. I hate to say this, but Maxwell cheated. The gas cannot be treated as an isolated system in the presence of the demon. The whole system would then consist of the gas *plus the demon*. In the process of selecting between fast and slow molecules,

the demon's entropy would have to increase by an amount that more than made up for the decrease in entropy that he brings about in the gas.

Of course, I know that you suspect I have never really studied demons of any type, let alone one of the Maxwell variety. Nevertheless, I am confident of the truth of my statement, for the whole structure of scientific knowledge requires that the demon's entropy behave in this fashion.

And if man ever invents a device that will duplicate the activity of the demon, then you can bet that that device will undergo an entropy increase greater than the entropy decrease it will bring about. You will be perfectly safe to grant any odds at all.

The cold fact is that entropy increase cannot be beaten. No one has ever measured or demonstrated an overall entropy decrease anywhere in the Universe under any circumstances.

But entropy is strictly applicable only to questions of energy flow. It can be defined in precise mathematical form in relation to heat and temperature and is capable of precise measurement where heat and temperature are concerned. What, then, if we depart from the field where entropy is applicable and carry the concept elsewhere? Entropy will then lose its rigorous nature and become a rather vague measure of orderliness or a rough indicator of the general nature of spontaneous change.

If we do that, can we work up an argument to demonstrate anything we can call an entropy decrease in the broad sense of the term?

Here's an example brought up by a friend of mine during an evening of excellently heated discourse. He said:

"As soon as we leave the world of energy, it is perfectly possible to decrease entropy. Men do it all the time. Here is Webster's New International Dictionary. It contains every word in *Hamlet* and *King Lear* in a particular order. Shakespeare took those words, placed them in a different order and created the plays. Obviously, the words in the plays represent a much higher and more significant degree of order than do the words in the dictionary. Thus they represent, in a sense, a decrease in entropy. Where is the corresponding increase in entropy in Shakespeare? He ate no more, expended no more energy, than if he had spent the entire interval boozing at the Mermaid Tavern."

He had me there, I'm afraid, and I fell back upon a shrewd device I once invented as a particularly ingenious way out of such a dead end. I changed the subject.

But I returned to it in my thoughts at periodic intervals ever since.

Since I feel (intuitively) that entropy increase is a universal necessity, it seemed to me I ought to be able to think up a line of argument that would make Shakespeare's creations of his plays an example of it.

And here's the way the matter now seems to me.

If we concentrate on the words themselves, then let's remember that Shakespeare's words make sense to us only because we understand English. If we knew only Polish, a passage of Shakespeare and a passage of the dictionary would be equally meaningless. Since Polish makes use of the Latin alphabet just as English does and since the letters are in the same order, it follows, however, that a Polish-speaking individual could find any English word in the dictionary without difficulty (even if he didn't know its meaning) and could find the same word in Shakespeare only by good fortune.

Therefore the words, considered only as words, are in more orderly form in the dictionary, and if the word order in Shakespeare is compared with the word order in the dictionary, the construction of the plays represents an increase in entropy.

But in concentrating on the words as literal objects (a subtle pun, by the way) I am, of course, missing the point. I do that only to remove the words themselves from the argument.

The glory of Shakespeare is not the physical form of the symbols he uses but the ideas and concepts behind those symbols. Let Shakespeare be translated into Polish and our Polish-speaking friend would far rather read Shakespeare than a Polish dictionary.

So let us forget words and pass on to ideas. If we do that, then it is foolish to compare Shakespeare to the dictionary. Shakespeare's profound grasp of the essence of humanity came not from any dictionary but from his observation and understanding of human beings.

If we are to try to detect the direction of entropy change, then, let us not compare Shakespeare's words to those in the dictionary; but Shakespeare's view of life to life itself.

Granted that no one in the history of human literature has interpreted the thoughts and emotions of mankind as well as Shakespeare has (I have just seen Olivier's "Hamlet" once again and I am, as usual, shaken) it does not necessarily follow that he has improved on life itself.

It is simply impossible with any cast of characters fewer than all men who have ever existed, with any set of passions weaker or less complex and intertangled than all that have ever existed, completely to duplicate life. Shakespeare has had to epitomize and has done that superlatively well. In a cast of twenty and in the space of three hours, he exhibits more emotion and a more sensitive portrayal of various fac-

ets of humanity than any group of twenty real people could possibly manage in the interval of three real hours. In that respect he has produced what we might call a local decrease in entropy.

But if we take the entire system, and compare all of Shakespeare to all of life; surely it must be clear that Shakespeare has inevitably missed a vast amount of the complexity and profundity of the human mass and that his plays represent an overall increase of entropy.

And what is true for Shakespeare is true for all mankind's intellectual activity, it seems to me.

How I can put this I am not certain, but I feel that nothing the mind of man can create is truly created out of nothing. All possible mathematical relationships, natural laws, combinations of words, lines, colors, sounds, all—everything—exists at least in potentiality. A particular man discovers one or another of these but does not create them in the ultimate sense of the word.

In seizing the potentiality and putting it into the concrete, there is always the possibility that something is lost in the translation, so to speak, and that represents an entropy increase.

Perhaps very little is lost, as for instance in mathematics. The relationship expressed by the Pythagorean theorem existed before Pythagoras, mankind, and the earth. Once grasped, it was grasped as it was. I don't see what can have been significantly lost in the translation. The entropy increase is virtually zero.

In the theories of the physical sciences, there is clearly less perfection and therefore a perceptible entropy increase. And in literature and the fine arts, intended to move our emotions and display us to ourselves, the entropy increase—even in the case of transcendent geniuses such as Sophocles and Beethoven—must be vast.

And certainly there is never an improvement on the potentiality, there is never a creation of that which has no potential existence. Which is a way of saying there is never a decrease in entropy.

I could almost wish, at this point, that I were in the habit of expressing myself in theological terms, for if I were, I might be able to compress my entire thesis into a sentence.

All knowledge of every variety (I might say) is in the mind of God—and the human intellect, even the best, in trying to pluck it forth can but "see through a glass, darkly."

Another example of what appears to be steadily decreasing entropy on a grand scale lies in the evolution of living organisms.

I don't mean by this the fact that organisms build up complex compounds from simple ones or that they grow and proliferate. This is done

at the expense of solar energy and it is no trick at all to show that an over-all entropy increase is involved.

There is a somewhat more subtle point to be made. The specific characteristics of living cells (and therefore of living multicellular organisms, too, by way of the sex cells) are passed on from generation to generation by duplication of genes. The genes are immensely complicated compounds and, ideally, the duplication should be perfect.

But where are ideals fulfilled in this imperfect Universe of ours? Errors will slip in and these departures from perfection in duplication are called mutations. Since the errors are random and since there are many more ways in which a very complex chemical can lose complexity rather than gain it, the large majority of mutations are for the worse in the sense that the cell or organism loses a capacity that its parent possessed.

(By analogy, there are many more ways in which a hard jar is likely to damage the workings of a delicate watch than to improve them. For that reason do not hit a stopped watch with a hammer and expect it to start again.)

This mutation-for-the-worse is in accord with the notion of increasing entropy. From generation to generation, the original gene pattern fuzzes out. There is an increase of disorder, each new organism loses something in the translation, and life degenerates to death. This should inevitably happen if only mutations are involved.

Yet this does not happen.

Not only does it not happen, but the reverse *does* happen. On the whole, living organisms have grown more complex and more specialized over the eons. Out of unicellular creatures came multicellular ones. Out of two germ-layers came three. Out of a two-chambered heart came a four-chambered one.

This form of apparent entropy-decrease cannot be explained by bringing in solar energy. To be sure, an input of energy in reasonable amounts (short of the lethal level, that is) will increase the mutation rate. But it will not change the ratio of unfavorable to favorable changes. Energy input would simply drive life into genetic chaos all the faster.

The only possible way out is to have recourse to a demon (after the fashion of Maxwell) which is capable of picking and choosing among mutations, allowing some to pass and others not.

There is such a demon in actual fact, though, as far as I know, I am the only one who has called it that and drawn the analogy with Maxwell's demon. The English naturalist, Charles Robert Darwin, discovered the demon, so we can call it "Darwin's demon" even though Darwin himself called it "natural selection."

Those mutations which render a creature less fit to compete with other organisms for food, for mating or for self-defense, are likely to cause that creature to come to an untimely end. Those mutations which improve the creature's competing ability are likely to cause that creature to flourish. And, to be sure, fitness or lack of it relates only to the particular environment in which the creature finds itself. The best fins in the world would do a camel no good.

The effect of mutation *in the presence of natural selection*, then, is to improve continually the adjustment of a particular creature to its particular environment and that is the direction of increasing entropy.

This may sound like arbitrarily defining entropy increase as the opposite of what it is usually taken to be—allowing entropy increase to signify increased order rather than increased disorder. This, however, is not so. I will explain by analogy.

Suppose you had a number of small figurines of various shapes and sizes lined up in orderly rank and file in the center of a large tray. If you shake the tray, the figurines will move out of place and become steadily more disordered.

This is analogous to the process of mutation without natural selection. Entropy obviously increases.

But suppose that the bottom of the tray possessed depressions into which the various figurines would just fit. If the figurines were placed higgledy-piggledy on the tray with not one figurine within a matching depression, then shaking the tray would allow each figurine to find its own niche and settle down into it.

Once a figurine found its niche through random motion, it would take a hard shake to throw it out.

This is analogous to the process of mutation with natural selection. Here entropy increases, for each figurine would have found a position where its center of gravity is lower than it would be in any other nearby position. And lowering the center of gravity is a common method of increasing entropy as, for instance, when a stone rolls downhill.

The organisms with which we are best acquainted have improved their fit to their environment by an increase in complexity in certain particularly noticeable respects. Consequently, we commonly think of evolution as necessarily proceeding from the simple to the complex.

This is an illusion. Where a simplifying change improves the fit of organism to its environment, then the direction of evolution is from the complex to the simple. Cave creatures who live in utter darkness usually lose their eyes although allied species living in the open retain theirs.

The reptiles went to a lot of trouble (so to speak) to develop two pairs of legs strong enough to lift the body clear of the ground. The snakes gave up those legs, slither on abdominal scales, and **are** the most successful of the contemporary reptiles.

Parasites undergo particularly great simplifications. A tapeworm suits itself perfectly to its environment by giving up the digestive system it no longer needs, the locomotory functions it doesn't use. It becomes merely an absorbing surface with a hooked proboscis with which to catch hold of the intestinal lining of its host, and the capacity to produce eggs and eggs and eggs and—

Such changes are usually called (with more than a faint air of disapproval) "degenerative." That, however, is only our prejudice. Why should we approve of some adjustments and disapprove of others? To the cold and random world of evolution, an adjustment is an adjustment.

If we sink to the biochemical level, then the human being has lost a **great many** synthetic abilities possessed by other species and, in particular, by plants and micro-organisms. Our loss of ability to manufacture a variety of vitamins makes us dependent on our diet and, therefore, on the greater synthetic versatility of other creatures. This is as much a "degenerative" change as the tapeworm's abandonment of a stomach it no longer needs, but since we are prejudiced in our own favor, we don't mention it.

And, of course, no adjustment is final. If the environment changes; if the planetary climate becomes markedly colder, warmer, drier or damper; if a predator improves its efficiency or a new predator comes upon the scene; if a parasitic organism increases in infectivity or virulence; if the food supply dwindles for any reason—then an adjustment that was a satisfactory one before becomes an unsatisfactory one, and the species dies out.

The better the fit to a particular environment, the smaller the change in environment required to bring about extinction. Long-lived species are therefore those which pick a particularly stable environment or are those that remain somewhat generalized, being fitted well enough to one environment to compete successfully within it, but not so well as to be unable to shift to an allied environment if the first fails them.

In the case of Darwin's demon (as in that of Maxwell's demon) the question as to the role of human intelligence arises. Here it is not a matter of imitating the demon, but, rather, of stultifying it.

Many feel that the advance of human technology hampers the working of natural selection. It allows people with bad eyes to get along by

means of glasses; diabetics to get along by means of insulin injections; the feeble-minded to get along by means of welfare agencies and so on.

Some people call this "degenerative mutation pressure" and, as you can see from the very expression used, are concerned about it. Everyone without exception, as far as I know, considers this a danger to humanity, although practically nobody proposes any non-humane solutions.

And yet is it necessarily a danger to humanity?

An editor I know is never satisfied with a science fiction plot, however good, until he has stood it on its head and inspected it in that position.* This can be frustrating but sometimes it brings about interesting results.

So let's turn degenerative mutation pressure upside down and see if it can't be viewed as something other than a danger.

In the first place, we can't really stultify Darwin's demon, for natural selection must work at all times, by definition. *Man is part of nature* and his influence is as much a natural one as is that of wind and water.

So let us assume that natural selection is working and ask what it is doing. Since it is fitting man to his environment (the only thing Darwin's demon can or does do) we must inquire as to what man's environment is. In a sense, it is all the world, from steaming rain jungle to frozen glacier, and all contemporary men, however primitive, band together into societies that can more or less change the environment to suit their needs even if only by building a campfire or chipping a rock or tearing off a tree branch.

Consequently, it seems clear that the most important part of a man's environment is other men—or, if you prefer, human society. The vast majority of men, in fact, live as part of very complex societies that penetrate every facet of their lives.

If near-sightedness is not the handicap in New York that it would have been in a primitive hunting society, or if diabetes is not the handicap in Moscow that it would have been in a non-biochemical society, then why should there be any evolutionary pressures in favor of keeping unnecessarily good eyes and functional pancreases?

Man is to an increasing extent a parasite on human society and perhaps what we call "degenerative mutation pressure" is simply better fitting him to his new role, just as it better fit the tapeworm to its role. We may not like it, but it is a reasonable evolutionary change.

*Not the Kindly Editor, I hasten to say. I do, after all, have other editors, though none are quite as charming, handsome and erudite as he.—I say this only because the K.E.'s lower lip will quiver if I don't.—THE GOOD DOCTOR.

There are many among us who chafe at the restrictions of the crowded ant-hills we call cities, at the slavery to the clock-hand, at the pressures and tensions. Some revolt by turning to delinquency, to "anti-social behavior." Others search out the dwindling areas where man can carry on a pioneer existence.

But if our ant-hills are to survive we need those who will bend to its needs, who will avoid walking on grass, beating red lights and littering sidewalks. It is particularly the metabolically handicapped that can be relied on to do this for they cannot afford to fight a society on which they depend, very literally, for life. A diabetic won't long for the great outdoors if it means his insulin supply will vanish.

If this is so, then Darwin's demon is only doing what comes naturally.

But of all environments, that produced by man's complex technology is perhaps the most unstable and rickety. In its present form, our society is not two centuries old, and a few nuclear bombs will do it in.

To be sure, evolution works over long periods of time and two centuries is far from sufficient to breed *Homo technikos*.

The closer this is approached however, the more dangerous would become any shaking of our social structure. The destruction of our technological society in a fit of nuclear peevishness would become disastrous even if there were many millions of immediate survivors.

The environment to which they were fitted would be gone, and Darwin's demon would wipe them out remorselessly and without a backward glance.

COMING SOON . . .

"Napoleon's Skull Cap," by Gordon R. Dickson

"Wonder As I Wander," by Manly Wade Wellman

"Who's in Charge Here?" by James Blish

"Subcommittee," by Zenna Henderson

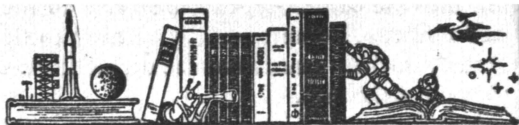
"Rebel," by Ward Moore

"One into Two," by J. T. McIntosh

"Shards," by Brian W. Aldiss

"The Golden Horn," by Edgar Pangborn

BOOKS



THE GLASS BEES, Ernst Juenger, Noonday Press,
\$1.65

THE CHOUL KEEPERS, edited by Leo Margulies,
Pyramid, 35¢

A FALL OF MOONDUST, Arthur C. Clarke, Harcourt,
Brace & World, Inc., \$3.95

MIND PARTNER, and 8 other novelets from *Galaxy*,
edited by H. L. Gold, Doubleday, \$3.95

THE GLASS BEES by Ernst Juenger is a remarkable book, half Grand Guignol, part parable, vaguely science fiction, not at all a novel. It is a stream of metaphilosophical consciousness. It is a reflection on the contrast between XIXth century idealism and XXth century materialism. It is a penetrating revelation of the thinking of a self-destructive man. It is, like all unusual books, wonderfully impossible to categorize.

Captain Richard, narrator, philosopher, and protagonist, is a

former officer of the Light Cavalry, presumably in Austria, although the country is never specified. He has been demobilized and cast adrift in a country torn by revolution and change after defeat in a war which, also, is not identified, but one may presume was World War I, since it was the last in which cavalry was engaged prior to the development of tanks.

Through the dubious kindness of a colleague, another former officer, Richard is offered a dangerous but unspecified job with

the great Zapparoni, and goes out to the Zapparoni factory for an interview. Zapparoni is a fantastic Italian who manufactures robots of all kinds for all purposes. Some of them are mari-onettes, handsomer than human beings, which are used in theatrical performances.

At the Zapparoni Works, Richard is subjected to trial by robot ordeal, being tested by a swarm of glass bees to discover whether he has the cool resolution and unscrupulous attitude that his predecessor lacked, which lack brought about that unfortunate man's destruction. This is the bare outline of the story.

But on this twisted frame is woven a rich texture of meditation on human folly, human ideals, human defeat; the contrast between the last century and the present; and the drives and compulsions of the self-destructive. The book is unobtrusively and smoothly translated from the German by Louise Bogan and Elizabeth Mayer.

This department is ancient enough to remember the great UFA films made in Germany after World War I. Ernst Juenger, along with Herman Hesse, presently captures that strange and moving quality in Germany after World War II. We often wonder why it is that Germany must take a licking in a war before her genius for Gothic art emerges;

which genius, by the by, is always smothered by the return of prosperity and pride.

THE GLASS BEES should be a must.

A copy of THE GHOUL KEEPERS, edited by Leo Margulies, was sent to us with a little note from the editors of Pyramid Books. We had complained angrily in a past review that an anthology of theirs had been miserably made-up and printed. Pyramid courteously explained that the acknowledged flaws had been by accident, not intent; a mistaken printer's estimate was the cause. They asked if we didn't think this volume was better done. It is indeed, and we apologize.

THE GHOUL KEEPERS is a collection of *Weird*-type fantasy, featuring old stories by such masters as Theodore Sturgeon, Ray Bradbury, Henry Kuttner, Sprague de Camp and Fletcher Pratt. We cannot comment on them because we've always loathed the old style pulp fantasy, and must bar ourself for prejudice. However, we suspect that many readers must have been of the same mind, which is why the immortal *Unknown* and this magazine became so popular when they ushered in the new era of sophisticated fantasy.

But if you have a nostalgia for the old grue: ghosts of little girls who build sand castles ("The Lake"), warlocks and rapier-wield-

ing warriors shouting "Hola!" ("Spawn of Dagon"), unknown islands peopled by a dreaming Vedantist ("The Isle of the Sleeper"), and cryptic messages from space ("The Martian and the Moron"), then this collection is your cup of witch's brew.

Arthur C. Clarke is one of the finest English science fiction authors; in fact, one of the best in the world. A FALL OF MOONDUST is a characteristic Clarke novel, carefully thought out, meticulously developed, and written in Mr. Clarke's even, modulated style.

On the moon of the future, vacationers are conducted on a sight-seeing cruise around the Sea of Thirst in the *Selene*, a special "boat" designed to sail on the surface of the fine volcanic dust that fills the Sea. This sea of dust is hundreds of feet deep.

Mr. Clarke theorizes that the moon is not altogether inert, and that there is still a slow escape of gases from the interior. This gas collects in a giant bubble which bursts in the Sea of Thirst, forming a vast pit in the dust. The *Selene* plummets down, and before it can fight its way out, is covered over and buried. Passengers and crew are lost.

The novel then develops into an account of the search for the lost ship, the rescue attempts, and the efforts of the *Selene* personnel to extricate themselves. Over all this

hangs the suspense of limited oxygen supply, and the mounting hysteria of people who are meeting death in a lump.

It's all theoretically interesting, but not quite dramatic enough for the taste of this department, which is why we opened our review with the reference to Mr. Clarke's English background. He demonstrates the point we've often made before; that English authors seem to lack the emotional impact and dramatic drive of their American colleagues. A Heinlein, a Budrys, or a Sturgeon in the same story would not only have interested you; they'd have made you sweat big drops.

MIND PARTNER and 8 other novelets from *Galaxy* Magazine, is edited by Horace Gold, who also, we have no doubt, had a considerable hand in the shaping of the stories. That is Mr. Gold's style. This department again pays tribute to Mr. Gold's mastery as an editor with the admission that we loved three of his selections, hated three, and were indifferent to the rest. This is collecting at its best, for it's Mr. Gold's job to make sure that there is something in his anthology for everybody. Obviously, if we had enjoyed all the novelets, there would have been many who would have hated all of them. This way, Mr. Gold has adroitly split the difference in tastes.

The stories range through po-

litical and military machinations of a future world of hired dictators ("Blacksword," by A. J. Offutt), Galactic trading ("The Hardest Bargain," by Evelyn E. Smith), time fantasy for a myopic ("The Sly Bungerhop," by William Morrison), and outre alien life-forms giving a harrassed hotel manager a hard time ("The Stenorii Luggage," by Neal Barrett, Jr.).

Our favorites were the title story, by Christopher Anvil, a gripping working-out of the story-within-the-story-within-the-story, or Quaker Oats theme; "Snuffles,"

by R. A. Lafferty, a genuinely original treatment of an odd and disturbing theme; and "The Lady Who Sailed The Soul," by Cordwainer Smith, a fever-ridden romance carrying so much conviction that you could swear it had been written in the future and shot back to his agent in a time-capsule.

Cordwainer Smith, by the way, is an author who has never failed to excite and intrigue us with his fresh, unique style, always subtle and always off-trail. Our only complaint is that he doesn't write often enough. —Alfred Bester

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PRELUDE TO A LONG WALK

by Nils T. Peterson

. . . woe unto them that join house to house, that lay field to field, till there be no place that they be placed alone in the midst of the earth. . . .

He sat on his hill and watched the cities join one another. At first they touched gently like young lovers. A slight touch, a most fragile gesture. And then two ten lane highways joined the swollen cities, joining the luminescence that marked the city in the north to the luminescence that marked the city in the south to the old man as he watched at night. Each road was of drawn silver, a piece of the moon stretched and pulled and squared. And the people of the cities had commerce with each other.

"What do you need, old man?"

"What do you want, old man?"

"How much do you want, old man?"

For many springs the old man had brought out onto his wooden porch his straight-backed rocker towards the end of April to be left there until the winds of October bolted him in for the winter. The old man would sit on his porch in

the evening after he had eaten what little he bothered to eat anymore, and sometimes he looked for the sake of looking, and sometimes he looked for the sake of seeing, and sometimes he looked for the sake of having a place to rest his eyes. His hands were very still resting quietly on the thickened ends of the armrests of his rocker, ends which had been worn and shaped by his hands (or had worn and shaped his hands) until there was no need for movement.

"I spoke up first, old man."

"I'll offer more, old man."

"My company's bigger, old man."

Behind his hill where he could not see because of the stand of tall pine, the cities also touched. First the highway and then the inevitable union. He did not see it happen, but he could feel it, a sensitivity, an awareness on the back of his neck. The bulldozers would march down the day-blackened strips of highway, veer off to the sides, and start carving paths out of the good black loam that had supported forests, then farms, and now contractors. Then up would go the houses, split-levels, ranch, bubble, neo-colonial, salt-box, cracker

box, animal cracker box. Then mushroomed the shopping centers of smooth, orange brick and glass. Ashtrays from Japan. Cuckoo clocks from Germany. Gimcracks, knick-knacks, doodads stamped from tin, molded from plastic, and all lacquered from the same barrel. (Mommy buy me this. Daddy, all the other kids have one. Henry, Marion Washington has just bought a . . . You can get me this for Christmas, New Years', George Washington's Birthday, the Vernal Equinox.) Too fast.

"It'll be butter and eggs and a pound of cheese for life, old man."

"It'll be white bread and lamb and now and then ham for life, old man."

"Synthetic or real however you feel, old man."

The two cities met, embraced, and became one. Then came the three round men with butter voices up the dusty wagon track to the top of the old man's hill. The hill was surrounded, choked off, the only clean land in several thousand square miles.

"The city needs your property, old man."

"The state needs your property, old man."

"The country needs your property, old man."

But the old man said no.

"We can build a hundred estates, old man."

"We can build a thousand homes, old man."

"Five thousand families can live here, old man."

But the old man said no.

"The city will condemn your property, old man."

"The state will condemn your property, old man."

"The country will condemn your property, old man."

The old man stood up realizing his answer made no difference at all.

"Who will live here?" he then asked.

"The nation's finest people, old man."

"Executives from the largest companies, old man."

"I and my kind, old man. We must inherit the earth."

"If you yourself will live here," said the old man to the third butter voice, "then it is right that you should have it." He went inside and closed the door on the three round men perspiring in the sun. . . .

Two days later he walked down the least traveled highway with a television antenna over his shoulder to find a place where no man would ask what it was.

In "The Sky People" (F&SF, March 1959) Poul Anderson described re-emerging nationalistic civilizations—techniques and cultures owing debts to incomplete memories and records of the past, but with alliances and surface textures rather different. The Sky People return here in a swift-flowing saga, alive with color, and fresh with the winds of a (for the time, at least) untainted atmosphere.

PROGRESS

by Poul Anderson

I

"THERE THEY ARE! AIRCRAFT ho-o!"

Keanua's bull bellow came faintly down to Ranu from the crow's nest, almost drowned in the slatting and cracking of sails. He could have spoken clearly head-to-head, but best save that for real emergencies. Otherwise, by some accident, the Brahmards might learn about it.

If they don't already know, Ranu thought.

The day was too bright for what was going to happen. Big wrinkled waves marched past. Their backs were a hundred different blues, from the color of the sky overhead to a royal midnight; their troughs shaded through gray-amber to a clear green. Foam

swirled intricately upon them. Further off they became a single restlessness that glittered with sunlight, on out to the horizon. They rushed and rumbled, they chuckled against the hulls, which rolled somewhat beneath Ranu's feet, making him aware of the interplay in his leg muscles. Wind skirled in the rigging. The air was warm but had a strong thrust and saltiness to it.

Ranu wished he could sink into the day. Nothing would happen for minutes yet. He should think only about sunlight warming his skin, wind ruffling his hair, blue shadows upon an amazingly white cloud high up where the air was not so swift. Once the Beneghalis arrived, he might be dead. Keanua, he felt sure, wasn't worrying about that until the time came

But then, Keanua was from Taiiti. Ranu was born and bred in N'Zealann; his Maurai genes were too mixed with the old fretful Ingliss. It showed on his body also, tall and lean, with a narrow face and beaky nose, brown hair and the rarity of blue eyes.

He unslung his binoculars and peered after the airship. A light touch on his arm recalled him. He lowered the glasses and smiled lopsided down at Alisabeta Kanukauai.

"Still too far to see from here," he told her. "The topmasts get in the way. But don't bother going aloft. It'll be overhead before you could get halfway up the shrouds."

The wahine nodded. She was rather short, a trifle on the stocky side, but because she was young her figure looked good in the brief lap-lap. A hibiscus flower from the deck garden adorned her blue-black hair, which was cut off just below the ears like the men's. Sailors couldn't be bothered with glamorous tresses, even on a catamaran as broad and stable as this. On some ships, of course, a woman had no duties beyond house-keeping. But Alisabeta was a cyberneticist. The Lohannaso Shippers' Association, to which she and Ranu were both related by blood, preferred to minimize crews; so everybody doubled as something else.

That was one reason the *Aorangi* had been picked for this task.

The fact of Alisabeta's technical training could not be hidden from the Brahmards. Eyes sharpened by suspicion would see a thousand subtle traces left by years of mathematical logic, physics, engineering. But it would be only natural in a Lohannaso girl.

Moreover, if this job went sour, only three lives would have been sacrificed. Some merchant craft had as many as ten kanakas and three wahines aboard.

"I suppose I'd better get back to the radio," said Alisabeta. "They may want to communicate."

"I doubt that," said Ranu. "If they aren't simply going to attack us from above, they'll board. They said they would. But, yes, I suppose you had better stand by."

His eyes followed her with considerable pleasure. Usually, in the culture of the Sea People, there was something a little unnatural about a career woman, a female to whom her own home and children were merely incidental if she elected to have any at all. But Alisabeta had been as good a cook, as merry a companion, as much alive in a man's arms on moonlit nights, as any seventeen-year-old, off wide-eyed to see the world before she settled down. And she was a damned interesting talk-friend, too. Her interpretations of the shaky ethnopolitical situation were so shrewd you might have thought her formally educated in psychodynamics.

I wonder, Ranu said to himself, slowly, not for the first time. Marriage could perhaps work out. It's almost unheard of for a sailor, even a skipper, to have a private woman along. And children. . . . But it has been done, once in a while.

She vanished behind the carved porch screen of the radio shack, on whose vermin-proofed thatch roof a bougainvillea twined and flared with color. Ranu jerked his mind back to the present. *Time enough to make personal plans if we get out of this alive.*

The airship hove into view. The shark-shaped gasbag was easily a hundred meters long, the control fins spread out like roc's wings. Propeller noise came softly down through the wind. On the flanks was painted the golden Siva symbol of the Brahmarid sci-entocracy: destruction and re-birth.

Rebirth of what? Well, that's what we're here to find out.

The Aorangi was drifting before the wind, but not very fast, with her sails and vanes skewed at such lunatic angles. The aircraft paced her easily, losing altitude until it was hardly above deck level, twenty meters away. Ranu saw turbaned heads and high-collared tunics lining the starboard observation verandah. Keanua, who had scrambled down from the crow's nest, hurried to the port rail and placed himself by

one of the cargo-loading kingposts. He pulled off his shirt—even a Taitian needed protection against this tropical sea-glare, above the shade of the sails—and waved it to attract attention. Ranu saw a man on the flyer nod and issue instructions.

Keanua worked the emergency handwheels. A boom swung out. A catapult in the bow of the airship took aim and shot a grapnel. That gunner was good. The hook engaged the cargo sling on the first try. There were two lines attached. Keanua—a thick man with elaborate tattoos on his flat cheerful face—brought the grapnel inboard and made one cable fast. He carried the other one aft and secured it at the next kingpost. A similar adjustment was made aboard the aircraft. The ships were linked.

The Aorangi heeled with the drag upon her. Sails thundered overhead. Ranu winced at the thought of the stresses imposed on his masts and yards. Ship timber wasn't exactly cheap, even after centuries of good forest management. (For a moment that stung he remembered those forests, rustling leaves, sunflecked shadows, a glade that suddenly opened on an enormous vista of downs and grazing sheep and one white waterfall: his father's home.) Then a balance was achieved. The Bene-ghali vessel rose enough that half a dozen men could slide down a

cable. The first came in a bosun's chair arrangement, but the others merely wrapped an arm and a leg around the line. Each free hand carried a weapon.

Ranu crossed the deck to meet them. The leader got out of his chair with cold dignity. He was not tall, but he held himself straight as a rifle barrel. Trousers, tunic, turban were like snow under the sun. His face was sharp, with tight lips in a grizzled beard. He bowed curtly. "At your service, captain," he said in the Beneghali version of Hinji. "Scientist-administrator Indravarman Dhananda makes you welcome." The tone was flat.

Ranu refrained from offering a handshake in the manner of the Maurai Federation. "Captain Ranu Carelo Makintairu," he said. Like many sailors, he spoke fluent Hinji. His companions had acquired the language in a few weeks' intensive training. They approached and Ranu introduced them. "Aeromotive technician Keanua Filipoa Jouberti; cyberneticist Alisabeta Kanukauai."

Dhananda's black eyes flickered about. "Are there others?" he asked.

"No," grunted Keanua. "We wouldn't be in this pickle if we had some extra hands."

The bearded, green-uniformed soldiers had quietly moved to command the whole deck. Some stood where they could see no one

lurked behind the cabins. They wasted no admiration on grained wood, sliding screens of Okkaidan shoji, or the strong curve of the roofs. This was an inhumanly businesslike civilization. Ranu noted that besides swords and telescoping pikes, they had two sub-machine guns.

Yes, he thought with a little chill under his scalp, *Federation Intelligence made no mistake. Something very big indeed is hidden on that island.*

Dhananda ceased weighing him. It was obvious that the scantily clad Maurai bore no weapons other than their knives. "You will forgive our seeming distrustfulness, captain," the Brahmard said. "But the Buruma coast is still infested with pirates."

"I know." Ranu made his features crease in a smile. "You see the customary armament emplacements on our own deck."

"Er . . . I understand from your radio call that you are in distress."

"Considerable," said Alisabeta. "Our engine is disabled. Three people cannot possibly set those sails."

"What about dropping the canvas and going on propellers?" asked Dhananda. His coldness returned. In Beneghal, only women for hire—a curious institution the Maurai knew almost nothing about—traveled freely with men.

"The screws run off the same

engine, sir," Alisabeta answered, more demurely than before.

"Well, you can let most of the sails fall, can't you, and stop this drift toward the reefs?"

"Not without smashing our superstructure," Ranu told him. "That canvas is *heavy*. Also, we would still have extremely poor control." He pointed at the steering wheel aft in the pilot house, now lashed in place. "The whole rudder system on craft of this type is based on sail adjustment. For instance, with the wind abeam like this, we ought to strip the mainmast and raise the *wan-aroa*—oh, never mind. It's a specially curved, semi-tubular sail with wind vanes on its yard, which redirects airflow aloft. These catamarans have shallow draft and not much keel. It makes them fast, but requires exact rigging."

"Mmmm . . . yes, I think I understand." Dhananda tugged his beard and brooded. "What do you need to make you seaworthy again?"

"A dock and a few days to work," said Alisabeta promptly. "With your help, we should be able to make Port Arberta."

"Um-m-m. There are certain difficulties about that. Could you not get a tow on to the mainland from some other vessel?"

"Not in time," said Ranu. He pointed east, where a shadow lay on the horizon. "We'll be aground

in a few more hours if something isn't done."

"You know how little trade comes on this route at this season," Alisabeta answered. "Yours was the only response to our SOS, except for a ship near the Nicbars." She paused before adding with what Ranu hoped was not an overdone casualness: "That ship promised to inform our Association of our whereabouts. Her captain assumed we would put into Arberta for repairs."

She was not being altogether untruthful. There were ships at Car Nicbar—camouflaged sea and aircraft, waiting. But they were hours distant.

Dhananda was not silent long. Whatever decision the Brahmard had made, it came with a swiftness and firmness that Ranu admired. (Though such qualities were not to be wished for in an enemy, were they?) "So be it," he yielded, rather sourly. "We shall assist you into harbor and see that the necessary work is completed. We can also radio the mainland that you will be late. Where were you bound?"

"Calcut," said Ranu. "Wool, hides, preserved whale flesh, timber, and algal oils."

"You are from N'Zealann, then," Dhananda concluded.

"Yes. Wellantoa registry. Uh, I'm being inhospitable. Can we not offer the honorable scientist refreshment?"

"Later. Let us get started first."

That took an hour or so. The Beneghalis were landlubbers, but strong enough to pull on a line at Keanua's direction. So the canvas was lowered, slowly and awkwardly, folded and stowed. A couple of studding sails and jibs were left up, a spanker and a flowsail were raised, and the ship began responding somewhat to her rudder. The aircraft paced alongside, still attached. It was much too lightly built, of wicker and fabric, to tow; but it acted as an aerial sea anchor. With her crabwise motion straight toward the reefs halted, the *Aorangi* limped landward.

Ranu took Dhananda on a guided tour. Few Hinjan countries practiced much ocean-borne trade. Their merchants went overland by camel caravan or sent high-priced perishables by air. The Brahmard had never been aboard one of the great vessels that bound together the Maurai Federation, from Awaii in the west to N'Zealann in the south, and carried the Cross and Stars flag around the planet. He was obviously looking for concealed weapons and spies in the woodwork. But he was also interested in the ship for her own sake.

"I am used to schooners and junks and the like," he said. "This looks radical."

"It's a rather new design," Ranu agreed. "But more are being built. You'll see many in the future."

With most sails down, the deck had taken on an austere look. Only the cabins, the hatches and kingposts, the sunpower collectors forward, and Keanua's flower garden broke that wide sweep. The two hulls were hidden beneath it, except where the prows jutted forth, bearing extravagantly carved tiki figureheads. There were three masts. Those fore and aft were more or less conventional; the mainmast was a tripod, built to withstand enormous forces. Dhananda admitted he was bewildered by the variety of yards and lines hanging against the sky.

"We trim the sails exactly according to wind and current," Ranu explained. "Continuous measurements are taken by automatic instruments. A computer below decks calculates what's necessary, and directs the engine in the work."

"I know aerodynamics and hydrodynamics are thoroughly developed sciences," Dhananda said, impressed. "Large modern aircraft couldn't move about on such relatively feeble engines as they have, unless they were designed with great care. But I had never appreciated the extent to which the same principles are being applied to marine architecture." He sighed. "That is one basic trouble with the world today, captain. Miserably slow communications. Yes, one can send a radio signal, or cross the ocean in days if the

weather is favorable. But so few people do it. The volume of talk and traffic is so small. An invention like this ship can be decades in development before anyone outside its own country is really aware of it. The benefits are denied to more remote peoples for . . . generations, sometimes."

He seemed to recognize the intensity which had crept into his voice, and broke off.

"Oh, I don't know," said Ranu. "International improvement does go on. Two hundred years ago, say, my ancestors were fooling around with multi-masted hermaphrodite craft, and the Mericans were actually sailing their blimps—with no anticatalyst for the hydrogen! Can you imagine such a firetrap? At the same time, if you'll pardon my saying so, the entire Hinjan subcontinent was a howling chaos of folk migrations. You couldn't have used even those square-rigger blimps, if someone had offered them to you."

"What has that to do with my remarks?" asked Dhananda frigidly.

"Just that I believe the Maurai government is right in advocating that the world go slow in making changes," said Ranu. He was being deliberately provocative, hoping to get a hint of how far things had gone on South Annaman. But Dhananda only shrugged, the dark face congealing into a mask.

"I would like to see your engine," said the Brahmar.

"This way, then. It's no different in principle from the engine of your airship, though: just bigger. Runs off electric accumulators. Of course, on a surface ship there's room to carry solar collectors and thus recharge our own power cells."

"I am surprised that you do not dispense with sails altogether and drive the ship by propellers."

"We do, but only in emergencies. After all, the sun is not a particularly concentrated energy source. We'd soon exhaust our accumulators if we made them move us at anything like a decent speed. Not even the newest type of fuel cells has capacity enough. As for that indirect form of sun-power storage known as organic fuel . . . well, we have the same problem in the Island as you do on the continents. Oil, wood, and the rest are too expensive to grow for commercial motors. No, we find the wind perfectly satisfactory. Except, to be sure, when the engine breaks down and we can't handle our sails! Then I could wish I were in a nice old-fashioned schooner, not this big, proud, thirty-knot cat."

"What happened to your engine, anyhow?"

"A freak accident. A defective rotor, operating at high speed, threw a bearing exactly right to break a winding line. I

suppose you know that armatures are customarily wound with ceramic tubing impregnated with a conductive solution. This in turn shorted out everything else. The damage is quite reparable. If we had ample sea room, we'd not have bothered with that SOS." Ranu tried to smile. "That's what humans are aboard for, you know. Theoretically our computer could be built to do everything. But in practice, something always happens that requires a brain which can think."

"A computer could be built to do that, too," said Dhananda.

"But could it be built to give a damn?" Ranu muttered in his own language. As he started down a ladder, one of the soldiers came between him and the sun, so that he felt the shadow of a pike across his back.

II

For centuries after the War of Judgment, the Annaman Islands lay deserted. Their natives regressed easily to a savage state, and took the few outside settlers along. The jungle soon reclaimed those towns the Ingliss had built in their own day. But eventually the outside world recovered somewhat. With its mixed Hinji-Tamil-Paki population firmly under the control of the Udayana Raj, Beneghal accumulated enough resources to send out an occasional

ship for exploration and trade. A garrison was established on South Annaman. Then the Maurai came. Their more efficient vessels soon dominated seaborne traffic. Nonetheless, Beneghal maintained its claim to the islands. The outpost grew into Port Arberta—which, however, remained small and sleepy, seldom visited by foreign craft.

After the Scientific Revolution in Beneghal put the Brahmards in power, those idealistic oligarchs tried to start an agricultural colony nearby. But the death rate was infamous and the attempt was soon discontinued. Since then, as far as the world knew, there had been nothing more important here than a weather station.

But the world didn't know much, Ranu reflected.

He and his companions followed the Beneghalis ashore. The wharf lay bare and bleached in the evening light. A few concrete warehouses stood with empty windows. Some primitive fisher boats had obviously been docked, unused, for months. Beyond the waterfront, palm-thatched huts straggled up from the bay. Ranked trees bespoke a plantation on the other side of the village. Then the jungle began, solid green on the hills, that rose inland in tiers until their ridges gloomed against the purpling east.

How quiet it was! The villagers

had come on the run when they sighted the great ship. They stood massed and staring, several hundred of them—native Annamese or half-breeds, with black skins and tufty hair and large shy eyes, clad in little more than loincloths. The mainland soldiers towered over them, the Maurai were veritable giants. They should have been swarming about, these people, chattering, shouting, giggling, hustling their wares, the potbellied children crying for sweets. But they only stared.

Keanua asked bluntly, "What's the matter with these folk? We aren't going to eat them."

"Strangers frighten them," Dhananda replied. "Slave raiders used to come here."

But that was fifty years ago, Ranu thought. No, any xenophobia they have now is due to rather more recent indoctrination.

"Besides," the Brahmard went on pointedly, "is it not Maurai doctrine that no culture has the right to meddle with the customs of any other?"

Alisabeta winced. "Yes," she admitted.

Dhananda made a surface smile. "I am afraid you will find our hospitality somewhat limited here. We haven't many facilities for entertainment."

Ranu looked to his right, past the village, where a steep bluff upheaved itself. On its crest he saw the wooden latticework sup-

porting a radio transmitter—chiefly for the use of the meteorological observers—and some new construction, bungalows and hangars around an airstrip. The earth scars were not entirely healed; this was hardly more than two or three years old. "You seem to be expanding," he remarked with purposeful naïveté.

"Yes, yes," said Dhananda. "Our government still hopes to civilize these islands and open them to extensive colonization. Everyone knows that the Beneghali mainland population is bulging at the seams. But first we must study conditions. Not only the physical environment which defeated our earlier attempt, but the inland tribes. We want to treat them fairly—but what does that mean in their own terms? The old intercultural problem. So we have scientific teams here, making studies."

"I see." As she walked toward a waiting donkey cart, Alisabeta studied the villagers with practiced sympathy. Ranu, who had encountered many odd folk around the world, belived he could make the same estimate as her. The little dark people were not undernourished, although their fishers had not been out to sea for a long time. They did not watch the Beneghalis as peasants watch tyrants. Rather, there was unease in the looks they gave the Maurai.

Water lapped in the bay. A gull

mewed, cruising about with sunlight golden upon its wings. Otherwise the silence grew enormous. It continued after the donkey trotted off, followed by hundreds of eyes. When the graveled road came up where the airfield was, a number of Beneghalis emerged from the houses to watch. They stood on their verandahs with the same withdrawn suspicion as the islanders.

The stillness was broken by a roar. A man came bounding down the steps of the largest house and across the field. He was as tall as Ranu and as broad as Keanua, dressed in kilt and blouse, his hair and mustache blazing yellow against a boiled-lobster face. A Merican! Ranu stiffened. He saw Alisabeta's fist clench on her knee.

"There you are! Welcome! Dhananda, why in Oktai's name didn't you tell me company was coming?"

The Brahmard looked furious. "We have only just gotten here," he answered in a strained voice. "I thought you were—" He broke off.

"At the laboratory for the rest of this week?" the Merican boomed. "Oh, yes, so I was, till I heard a foreign ship was approaching the harbor. One of your lads here was talking on the radiophone with our place, asking about our supplies or something. He mentioned it. I overheard. Commandeered an aircraft the

first thing. Why didn't you let me know? Welcome, you!" He reached an enormous paw across the lap of Dhananda, who sat tense and still, and engulfed Ranu's hand.

"Lorn's the name," he said. "Lorn sunna Browen, of Colorado University—and, with all due respect to my good Brahmard colleagues, sick for the sight of a new face. You're Maurai, of course. N'Zealanners, I'd guess. Right?"

He had been a major piece of the jigsaw puzzle that Federation Intelligence fitted together. Relations between the Sea People and the inland clans of southwest Merica remained fairly close, however little direct trade there was. After all, missions from Awaii had originally turned those aerial pirates to more peaceable ways. Moreover, despite the slowness and thinness of global communications, an international scientific community did exist. So the Maurai professors had been able to nod confidently and say yes, that Lorn fellow in Corado is probably the world's leading astrophysicist and the Brahmards wouldn't hire him for no reason.

But there was nothing furtive about him, Ranu saw. He was genuinely delighted to have visitors.

The Maurai introduced themselves. Lorn jogged alongside the cart, burbling like a cataract.

"What, Dhananda, you were going to put them up in that lousy *dāk*? Nothing doing! I've got my own place here, and plenty of spare room. No, no, Cap'n Ranu, don't bother about thanks. It's my pleasure. You can show me around your boat if you want to. I'd be interested in that."

"Certainly," said Alisabeta. She gave him her best smile. "Though isn't that a little out of your own field?"

Ranu jerked in alarm. But it was Keanua's growl which sounded in their brains: "*Hoy, there, be carefull! We're supposed to be plain merchant seamen, remember? We never heard of this Lorn man.*"

"I'm sorry!" One hand went to her mouth; the brown eyes widened in dismay. "I forgot."

"*Amateurs, the bunch of us,*" Ranu groaned. "*Let's hope our happy comrade Dhananda is just as inept. But I'm afraid he isn't.*"

The Brahmard was watching them keenly. "Why, what did you think the honorable Lorn's work was?" he asked.

"Something to do with your geographical research project," said Alisabeta. "What else?" She cocked her head and pursed her lips. "Now let me see if I can guess. The Mericans are famous for dry farming . . . but this climate is anything except dry. They are also especially good at mining and ore processing. Ah,

hah! You've found heavy-metal deposits in the jungle and you aren't letting on!"

Lorn, who had become much embarrassed under Dhananda's glare, cleared his throat and said with false heartiness: "Well, now, we don't want word to get around too fast, you understand? Spring a surprise on the mercantile world, eh?"

"Best leave the explanations to me, honorable sir." Dhananda's words fell like lumps of stone. The two soldiers accompanying the party in the cart hefted their scabbarded swords. Lorn glared and clapped a hand to his broad clansman's dagger.

The moment passed. The cart stopped before a long white bungalow. Servants—mainlanders who walked like men better accustomed to uniforms than livery—took the guests' baggage and bowed them in. They were given adjoining bedrooms, comfortably furnished in the somewhat ornate upper-class Hinji style. Since he knew his stuff would be searched anyway, Ranu let a silent valet help him change into a formal shirt and sarong. But he kept his knife. That was against modern custom, when bandits and barbarians were no longer quite so likely to come down the chimney. Nonetheless, Ranu was not going to let this knife out of his possession.

The short tropic twilight was

upon them when they gathered on the verandah for drinks. Dhananda sat in a corner, nursing a glass of something nonalcoholic. Ranu supposed the Brahmard—obviously the security chief here—had pulled rank on Lorn and insisted on being invited to eat. The Maurai skipper stretched himself in a wicker chair with Keanua on his left, Alisabeta on his right, Lorn beyond her.

Darkness closed in, deep and blue. The sea glimmered below; the land lay black, humping up toward stars that one by one trod brilliantly forth. Yellow candlelight spilled from windows where the dinner table was being laid. Bats darted on the fringe of sight. A lizard scuttled in the thatch overhead. From the jungle came sounds of wild pigs grunting, the scream of a startled peacock, numberless insect chirps. Coolness descended layer by layer, scented with jasmine.

Lorn mopped his brow and cheeks. "I wish to God I were back in Corado," he said in his own Ingliss-descended language, which he was gladdened to hear Ranu understood. "This weather gets me. My clan has a lodge on the north rim of the Gran' Canyon. Pines and deer and—Oh, well, it's worth a couple of years here. Not just the pay." His basso dropped. For a moment something like holiness touched the heavy features. "The work."

"I beg your pardon," Dhananda interrupted from the shadows. "But no one else knows what you are telling us."

"Oh, sorry. I forgot." The Merican switched to his badly accented Hinji. "I wanted to say, friends, when I finish here I'd like to go home via N'Zealann. It must be about the most interesting place on Earth. Wellantoa's damn near the capital of the planet, or will be one day, eh?"

"Perhaps!" Dhananda said.

"No offense," said Lorn. "I don't belong to the Sea People either, you know. But they are the most progressive country going."

"In certain ways," Dhananda conceded. "In others—Forgive me, guests, if I call your policies somewhat antiprogressive. For example, your consistent discouragement of attempts to civilize the world's barbarian peoples."

"Not that exactly," defended Ranu. "Where they offer a clear threat to their neighbors, of course the Federation is among the first powers to send in the peace enforcers—which, in the long run, means psychodynamic teams, to redirect the energies of the barbarians concerned. A large-scale effort is being mounted at this moment in Sina, as I'm sure you have heard."

"Just like you did with my ancestors, eh?" said Lorn, quite unabashed.

"Well, yes. But the point is, we

don't want to mold anyone else into our own image; nor see them molded into the image of, say, Beneghali factory workers or Meycan peons or Orgonian foresters. So our government does exert pressure on other civilized governments to leave the institutions of backward peoples as much alone as possible."

"Why?" Dhananda leaned forward. His beard jutted aggressively. "It's easy enough for you Maurai. Your population growth is under control. You have your sea ranches, your synthetics plants, your worldwide trade. Do you think the rest of mankind is better off in poverty, slavery, and ignorance?"

"Of course not," said Alisabeta. "But they'll get over that by themselves, in their own ways. Our trade and our example—I mean all the more advanced countries—such things can help. But they mustn't help too much, or the same thing will happen again that happened before the War of Judgment. I mean . . . what's the Hinji word? We call it cultural pseudomorphosis."

"A mighty long word for a lady as cute as you," said Lorn sunna Brown. He sipped his gin noisily, leaned over and patted her knee. Ranu gathered that his family had stayed behind when the Brahmards hired him for this job; and in their primness they had not furnished him with a substitute.

"You know," the Merican went on, "I'm surprised that merchant seamen can talk as academically as you do."

"Not me," grinned Keanua. "I'm strictly a deckhand type."

"I notice you have a bamboo flute tucked in your sarong," Lorn pointed out.

"Well, uh, I do play a little. To while away the watches."

"Indeed," murmured Dhananda. "And your conversation is very well informed, Captain Makintairu."

"Why shouldn't it be?" answered the Maurai, surprised. He thought of the irony if they should suspect he was not really a tramp ship skipper. Because he was nothing else; he had been nothing else his whole adult life. "I went to school," he said. "We take books along on our voyages. We talk with people in foreign ports. That's all."

"Nevertheless—" Dhananda paused. "It is true," he admitted thoughtfully, "that Federation citizens in general have the reputation of being rather intellectual. More, even, than would be accounted for by your enviable hundred-percent literacy rate."

"Oh, no," Alisabeta laughed. "I assure you, we're the least scholarly race alive. Even our professional scholars. We like to learn, of course, and think and argue. But isn't that simply one of the pleasures in life, among

many others? Our technology does give us abundant leisure for such things."

"Ours doesn't," said Dhananda rather grimly.

"Too many people, too few resources," Dhananda agreed. "You must've been to Calcut before, m' lady. But have you ever seen the slums? And I'll bet you never traveled through the hinterland and watched those poor dusty devils trying to scratch a living on the agrocollectives."

"I did, once," said Keanua with compassion.

"Well!" Lorn shook himself, tossed off his drink and rose. "We're being much too serious. I assure you, m' lady, we aren't such dry types at Corado University either. I'd like to take you and a couple of crossbows with me into the Rockies after mountain goat. . . . Come, I hear the dinner gong." He took Alisabeta's arm.

Ranu trailed after. *Mustn't eat too much*, he thought. *This night looks like the best time to start prowling.*

III

There was no moon. The time for the *Aorangi* had been chosen with that in mind. Ranu woke at midnight, as he had told himself to do. He had the common Maurai knack of sleeping a short time and being refreshed thereby. Sliding off the bed, he stood for minutes

looking out and listening. The airstrip reached bare beyond the house, gray under the stars. The windows in one hangar showed light.

A sentry tramped past. His forest-green turban and clothes, his dark face, made him another blackness. But a sheen went along his gun barrel. An actual explosive-cartridge rifle. And . . . his beat took him by this house.

Still, he was only one man. There should have been more. The Brahmards were as unskilled in espionage and secrecy as the Maurai. When Earth held a mere four or five scientifically-minded nations, with scant and slow traffic between them, serious conflict rarely arose. Even today Beneghal did not maintain a large army. Larger than the Federation's—but Beneghal was a land power and needed such protection against the barbarians. The Maurai had nearly all the naval strength, for a corresponding reason; and it wasn't much of a navy.

Call them, with truth, as horrible as you liked, those centuries during which the human race struggled back from the aftermath of nuclear war had had an innocence which the generations before the Judgment lacked. *I am afraid*, thought Ranu with a sadness that surprised him a bit, *we too are about to lose that particular virginity.*

No time for sentiment.

"Keanua, Alisabeta," he called in his head. He felt them come to alertness. "I'm going out for a look."

"Is that wise?" The girl's worry fluttered in him. "If you should be caught—"

"My chances are best now. We have them off guard, arriving so unexpectedly. But I bet Dhananda will double his precautions tomorrow, after he's worried overnight that we may be spies."

"Be careful, then," Keanua said. Ranu felt a kinesthetic overtone, as if a hand reached under the pillow for a knife. "Yell if you run into trouble. I think we might fight our way clear."

"Oh! Stay away from the front entrance," Alisabeta warned. "When Lorn took me out on the verandah after dinner to talk, I noticed a man squatting under the willow tree there. He may just have been an old syce catching a breath of air, but more likely he's an extra watchman."

"Thanks." Ranu omitted any flowery Maurai leavetaking. His friends would be in contact. But he felt their feelings like a hand-clasp about him. Neither had questioned that he must be the one who ventured out. As captain, he had the honor and obligation to assume extra hazards. Yet Keanua grumbled and fretted, and there was something in the girl's mind, less a statement than a color: she felt closer to him than to any other man.

Briefly, he wished for the physical touch of her. But— The guard was safely past. Ranu glided out the open window.

For minutes he lay flat on the verandah. Faint stirrings and voices came to him from the occupied hangar. A candle had been lit in one bungalow. The rest slept, ghostly under the sky. So far there was no activity in the open. Ranu slithered down into the flowerbed. Too late he discovered it included roses. He bit back a sailor's oath and crouched for minutes more.

All right, better get started. He had no special training in sneakery, but most Maurai learned judo arts in school and afterward their work and their sports keep them supple. He went like a shadow among shadows, rounding the field until he came to one of the new storehouses.

Covered by the gloom at a small rear door, he drew his knife. A great deal of miniturized circuitry had been packed into its handle, together with a tiny accumulator cell. The jewel on the pommel was a lens, and when he touched it in the right way a pencil beam of blue light sprang forth. He examined the lock. Not plastic, nor even aluminum bronze: steel. And the door was iron reinforced. What was so valuable inside?

From Ranu's viewpoint, a ferrous lock was a lucky break. He turned the knife's inconspicuous

controls, probing and grasping with magnetic pulses, resolutely suppressing the notion that every star was staring at him. After a long and sweaty while, he heard tumblers click. He opened the door gently and went through.

His beam flicked about. The interior held mostly shelves, from floor to ceiling, loaded with paperboard cartons. He padded across the room, chose a box on a rear shelf that wouldn't likely be noticed for weeks, and slit the tape. Hm . . . as expected. A dielectric energy accumulator, molecular distortion type. Standard equipment, employed by half the powered engines in the world.

But so many—in this outpost of loneliness?

His sample was fresh, too. Uncharged. Maurai agents had already seen, from commercial aircraft that "happened" to be blown off course, that there was only one solar energy collection station on the whole archipelago. Nor did the islands have hydroelectric or tidal generators. Yet obviously these accumulators had been sent here to be charged.

Which meant that the thing in the hills had developed much further than Federation Intelligence knew.

"Nan damn it," Ranu whispered to himself. "Sharktoothed Nan damn and devour it."

He stood a moment turning the black cube over and over in his

hands. His skin prickled. Then, with a shiver, he repacked the cell and left the storehouse as quietly as he had entered.

Outside he paused. Ought he to do anything else? This one bit of information justified the whole Aorangi enterprise. If he tried for more, and failed, and his party died with him, the effort would have gone for nothing.

However. . . . Time was hideously short. An alarmed Dhananda would find ways to keep other foreigners off the island—a faked wreck or something to make the harbor unusable—until too late. At least, Ranu must assume so.

He did not agonize over his decision; that was not a Maurai habit. He made it. *Let's have a peek in that lighted hangar, just for luck, and then go to bed. Tomorrow I'll try and think of some way to get inland and see the laboratory.*

A cautious half hour later he stood flattened against a wall, peering through a window. The vaulted interior of the hangar was nearly filled by a pumped-up gasbag. Motors idled, turning propellers into bright transparent circles. Several mechanics were making final checks. Two men from the bungalow where candles had been lit—Brahmards themselves, to judge from their white garb and authoritative manner—stood waiting while some junior

attendants loaded boxed apparatus into the gondola. Above the whirr, Ranu caught a snatch of talk between them:

"—unsanctified hour. Why now, for Vishnu's sake?"

"Those fool newcomers. They might be something else than distressed mariners, ever think of that? If so, they mustn't see us handling stuff like this." Four men staggered past bearing a coiled cable. The uninsulated ends shone the red of pure copper. "You don't use that for geographical research, what?"

Ranu felt his hair stir.

Two soldiers embarked, with guns. Ranu doubted they were going along merely because of the monetary value of that cable, fabulous though it was.

The scientists followed. The ground crew manned a capstan. Their ancient, wailing chant cut through the propeller noise like a protest—that human muscles must so strain when a hundred horses snored in the same room. The hangar roof and front wall began creakily folding aside.

Ranu went rigid.

He must unconsciously have shot his thought to the other Maurai. "No!" Alisabeta cried in him.

Keanua said more slowly: "*That's cannibal recklessness, skipper. You might fall and smear yourself over three degrees of latitude. Or if you should be seen—*"

"*I'll never have a better chance,*" Ranu said. "*We've already invented a dozen possible cover stories in case I disappear. So pick one and use it.*"

"*But you,*" Alisabeta begged. "*Alone out there!*"

"*It might be worse for you, if Dhananda should decide to get tough,*" Ranu answered. The Ingliss single-mindedness had come upon him, overriding the easy, indolent Maurai blood. But then that second heritage woke with a shout, for those who first possessed N'Zealann, the canoe men and moa hunters, would have dived laughing into an escapade like this.

He pushed down the glee and related what he had found in the storehouse. "*If there's any doubt about my safety, or your own, forget me and escape,*" he ordered. "*Intelligence has got to know at least this much. If I'm detected out there in the hills, I'll try to get away and hide in the jungle.*" The hangar was open, the aircraft slipping its cables. "*Farewell. Good luck.*"

"*Tanaroa be with you,*" Alisabeta called through her tears.

Ranu dashed around the corner. The aircraft was rising on a slant, gondola a black slab, bag an enormous pale cloud. The propellers threw wind in his face. He ran along the vessel's shadow, poised, and sprang.

Almost, he didn't make it.

His fingers closed on something, slipped, clamped with the strength of terror. Both hands, now! He was gripping an iron-wood bar, part of the mooring gear, his legs adangle over an earth that fell away below him with appalling swiftness. He sucked in a breath and chinned himself, got one knee over the bar, lay there and gasped.

The electric motors purred. A breeze whittered among struts and spars. Otherwise Ranu was alone with his heartbeat. After a while it slowed. He hitched himself to a slightly more comfortable crouch and looked about. The jungle was dappled black, far underneath him. The sea that edged it shimmered in starlight with exactly the same whiteness as the nacelles along the gondola. He heard a friendly creaking of wick-erwork, felt a sort of throb as the gasbag expanded in this higher-level air. The constellations wheeled grandly around him.

He had read about jet aircraft before the nuclear war, which outpaced the sun. Once he had even seen a fragment of an ancient film, discovered by archeologists and transferred to new acetate; there had been a sound track as well. He did not understand how anyone could want to sit locked in a howling coffin like that when he might have swum through the air, intimate with the night sky, as Ranu was doing.

However precariously, his mind added with wryness. He had not been seen, and he probably wasn't affecting the trim enough to make the pilot suspicious. Nevertheless, he had scant time to admire the view. The bar along which he sprawled, the sisal guy on which he leaned one shoulder, dug into his flesh. His muscles were already tiring. If this trip was any slower than he had guessed it would be, he'd tumble to earth.

Or else be too clumsy to spring off unseen and melt into darkness as the aircraft landed.

Or when he turned up missing in the morning, Dhananda might guess the truth and lay a trap for him.

Or anything! Stop your fuss, you idiot! You need all your energy for hanging on.

IV

The Brahmard's tread was light on the verandah, but Alisabeta's nerves were strung so taut that she sensed him and turned about with a small gasp. For an instant they confronted each other, un-speaking, the dark, slight, bearded man in his neat whites and the strongly built girl whose skin seemed to glow gold in the shade of a trellised grapevine. Beyond, the airstrip flimmered in mid-morning sunlight. Heat hazes wavered on the hangar roofs.

"You have not found him?" she asked at last, without tone.

Dhananda's head shook, slowly, as if his turban had become heavy. "No. Not a trace. I came back to ask you if you have any idea where he might have gone."

"I told your deputy my guess. Ranu . . . Captain Makintairu is in the habit of taking a swim before breakfast. He may have gone down to the shore about dawn and—" She hoped he would take her hesitation to mean no more than an unspoken: *Sharks. Rip tides. Cramp.*

But the black gaze continued to probe her. "It is most improbable that he could have left this area unobserved," Dhananda said. "You have seen our guards. There are more guards spotted downhill."

"What are you guarding against?" she counterattacked, to divert him. "Are you less popular with the natives than you claim to be?"

He parried her almost contemptuously: "We have reason to think two of the Buruman pirate kings have made alliance and gotten some aircraft. We do have equipment and materials here that would be worth stealing. Now, about Captain Makintairu. I cannot believe he left unseen unless he did so deliberately, taking great trouble about it. Why?"

"I don't know, I tell you!"

"You must admit we are duty

bound to consider the possibility that you are not simple merchant mariners."

"What else? Pirates ourselves? Don't be absurd." *I dare you to accuse us of being spies. Because then I will ask you what there is here to spy on.*

Only . . . then what will you do?

Dhananda struck the porch railing with a fist. Bitterness spoke: "Your Federation swears so piously it doesn't intervene in the development of other cultures."

"Except when self-defense forces us to," Alisabeta dared reply. "And then only a minimum."

He ignored that. "In the name of non-intervention, you are always prepared to refuse some country the sea ranching equipment that would give it a new start, or bribe somebody else *with* such equipment not to begin a full-fledged merchant service to a third and backward country . . . a service that would bring the backward country up to date in less than a generation. You talk about encouraging cultural diversity. You seem seriously to believe it's worthwhile keeping the Okkaidans impoverished fishermen so they'll be satisfied to write haiku and grow dwarf gardens for recreation. And yet—by Kali herself, your agents are everywhere!"

"If you don't want us here," Alisabeta snapped, "deport us and complain to our government."

"I may have to do more than that."

"But I swear—"

"Alisabeta! Keanua!"

Distance-attenuated, Ranu's message still stiffened her where she stood. She felt his tension, and an undertone of hunger and thirst, like a thrum along her own nerves. The verandah faded about her and she stood in blackness and heard a slamming of great pumps. Was there really a red warning light that went flash-flash-flash above a bank of transformers taller than a man?

"Yes, I'm inside," the rapid, blurred voice said in her skull. *"I watched my chance from the jungle edge. When an oxcart came along the trail with a sleepy native driver, I clung to the bottom and was carried through the gates. Food supplies. Evidently the workers here have a contract with some nearby village. The savages bring food and do guard duty. I've seen at least three of them prowling about with blowguns. Anyhow, I'm in. I dropped from the cart and slipped into a side tunnel. Now I'm sneaking about, hoping not to be seen."*

"The place is huge! They must have spent years enlarging a chain of natural caves. Air conduits everywhere—I daresay that's how our signals are getting through; I sense you, but faintly. Forced ventilation, with thermostatic controls. Can you imagine power ex-

penditure on such a scale? I'm going toward the center of things now for a look. My signal will probably be screened out till I come back near the entrance again."

"Don't, skipper," Keanua pleaded. *"You've seen plenty. We know for a fact that Intelligence guessed right. That's enough."*

"Not quite," Ranu said. The Maurai rashness flickered along the edge of his words. *"I want to see if the project is as far advanced as I fear. If not, perhaps the Federation won't have to take emergency measures—but I'm afraid we will."*

"Ranu!" Alisabeta called. His thought enfolded her. Then static exploded, interfering energies that hurt her perceptions. When it lifted, there was an emptiness in her head where Ranu had been.

"Are you ill, my lady?" Dhanda barked the question.

She looked dazedly out at the sky, unable to answer. He trod nearer. "What are you up to?" he pressed.

"Steady, girl," Keanua rumbled.

Alisabeta shook herself, squared her shoulders, and faced the Brahmar. "I'm worried about Captain Makintairu," she said coldly. "Does that satisfy you?"

"No."

"Hoy, there, you!" rang a voice from the front door. Lorn sunna Brown came forth. His kilted form overtopped them both; the

light eyes glittered angrily at Dhananda. "What kind of hospitality is this? Is he bothering you, my lady?"

"I am not certain that these people have met the obligations of a guest," Dhananda said, his control cracking open.

Lorn put arms akimbo, fists knotted. "Until you can prove that, though, just watch your manners. Eh? As long as I'm here, this is my house, not yours."

"Please," Alisabeta said. She hated fights. Why had she ever volunteered for this job? "I beg you . . . don't—"

Dhananda made a jerky bow. "Perhaps I am overzealous," he said without conviction. "If so, I beg your pardon. I shall continue the search for the Captain."

"I think—meanwhile—I'll go down to the ship and help Kea-nua work on the repairs," Alisabeta whispered.

"Very well," said Dhananda.

Lorn took her arm. "Mind if I come too? I never have seen an ocean-going craft close by. They flew me here when I was hired."

"I think you might best get back to your own work, sir," Dhananda said.

"When I'm good and ready, I will," Lorn answered airily. "Come, Miss . . . uh . . . m' lady." He led Alisabeta down the stairs and around the strip. Dhananda watched from the portico, motionless.

"You mustn't mind him," Lorn said after a while. "He's not a bad sort. A nice family man, in fact, pretty good chess player and a devil on the polo field. But this has been a long grind and his responsibility has kind of worn him down."

"Oh, yes. I understand," Alisabeta said. *But still he frightens me.*

Lorn ran a hand through his thinning yellow mane. "Most Bhamards are pretty decent," he said. "I've come to understand them in the time I've been working here. They're recruited young, you know, with psychological tests to weed out those who don't have the . . . the dedication, I guess you'd call it. Oh, sure, naturally they enjoy being a boss caste. But somebody has to be. No Hinjan country has the resources or the elbow room to govern itself as loosely as you Sea People do. The Brahmarshs want to modernize Beneghal—eventually the world. Get mankind back where it was before the War of Judgment, and go on from there."

"I know," Alisabeta said.

"I don't see why you Maurai are so dead set against that. Don't you realize how many people go to bed hungry every night?"

"Of course, of course we do!" she burst out. It angered her that tears should come so close to the surface of her eyes. "But can't anyone else understand . . . turn-

ing the planet into one huge factory isn't the answer? Have you read any history? Did you ever hear of . . . oh, just to name one such movement . . . the Communists? They too were going to end poverty and famine—and the best estimate is that they killed a hundred million of their own people. Starved them, shot them, worked them to death, in that fanatical effort. And this was *before* their foreign policies brought on the nuclear war. How many plagues would it take to wipe out that many human lives? And how much was the life of the survivors worth, under such masters?"

"But the Brahmards aren't like that," he protested. "See for yourself, down in the village. The natives are well taken care of. Nobody abuses them or coerces them. Same thing on the mainland. There's a lot of misery yet in Beneghal—famine going on right now—but it'll be overcome."

"Why haven't the villagers been fishing?" she challenged.

"Eh?" Taken aback, Lorn paused on the downhill path. The sun poured white across them both, made the bay a bowl of molten brass and seemed to flatten the jungle leafage into one solid listless green. The air was very empty and quiet. But Ranu crept through the belly of a mountain, where machines hammered.

"Well, it hasn't been practical

to allow that," said the Merican. "Some of our work is confidential. We can't risk information leaking out. But the Beneghalis have been feeding them. Hell, it amounts to a holiday for the fishers. They aren't complaining."

Alisabeta decided to change the subject, or even this big bundle of guilelessness might grow suspicious. "So you're a scientist," she said. "How interesting. But what do they need you here for? I mean, they have good scientists of their own."

"I . . . uh . . . I have specialized knowledge which is, uh, applicable," he said. "You know how the sciences and technologies hang together. Your Island biotechs breed new species to concentrate particular metals out of sea water, so naturally they need to know a good deal about metallurgics too. In my own case—uh—" Hastily: "I do want to visit your big observatory in N'Zealann on my way home. I understand they've photographed an ancient artificial satellite, still circling the Earth after all these centuries. I think maybe some of the records our archeologists have dug up in Merica would enable us to identify it. Knowing its original orbit and so forth, we could compute out a hell of a lot of information about the Solar System."

"Tanaroa, yes!" Eagerness jumped in her.

His red face, gleaming with

sweat, lifted toward the blank blue sky. "Of course," he murmured, almost to himself, "that's just a piddle compared to what we'd learn if we could get back out there in person."

"Build space probes again? Even spaceships?"

"Yes. If we had the power, and the industrial plant. By Oktai, but I get sick of this!" Lorn exclaimed. His grip on her arm tightened unconsciously till it was painful. "Scraping along on lean ores, tailings, synthetics, substitutes . . . because the ancients exhausted so much. Exhausted the good mines, most of the fossil fuels, coal, petroleum, uranium . . . then smashed their industry in the war and let the plant corrode away to unrecoverable dust in the dark ages that followed. That's what's holding us back, girl. We know everything our ancestors did and then some. But we haven't got the equipment they did to process materials on the scale they did, and we haven't the natural resources to rebuild that industrial plant. A vicious circle. We haven't got the capital to make it economically feasible to produce the giant industries that could accumulate the capital."

"I think we're doing quite well," she said, gently disengaging herself. "Sunpower, fuel cells, wind and water, biotechnology, sea ranches and sea farms, efficient agriculture—"

"We could do better, though." His arm swept a violent arc that ended with a finger pointed at the bay. "There! The oceans. Every element in the periodic table is dissolved there. Billions of tons. But we'll never get more than a minimum out with your fool biological methods. We need energy. Power to evaporate water by the cubic kilometer. Power to synthesize oil by the megabarrel. Power to go to the stars."

The raptness faded. He seemed shaken by his own words, shut his lips as if retreating behind the walrus mustache and resumed walking. Alisabeta came along in silence. Their feet scrunched on gravel and sent up little puffs of dust. Presently the dock resounded under them, they boarded the *Aorangi* and went across to the engine room hatch.

Keanua paused in his labors as they entered. He had opened the aluminum alloy casing and spread parts out on the deck, where he squatted in a sunbeam from an open porthole. Elsewhere the room was cool and shadowy; wavelets lapped the hull.

"Good day," said the Taiitian. His smile was perfunctory, his own thoughts inside the mountain with Ranu.

"Looks as if you're immobilized for a while," Lorn said, lounging back against a flame-grained bulkhead panel.

Until we find what has hap-

pened to our friend, surely," Keanua answered.

"I'm sorry about that," Lorn said. "I hope he comes back soon."

"Well, we can't wait indefinitely for him," Alisabeta made herself say. "If he isn't found by the time the engine is fixed, best we start for Calcut. Your group will send him on when he does appear, won't you?"

"Sure," said Lorn. "If he's alive. Uh, 'scuse me, my lady."

"No offense. We don't hold with euphemisms in the Islands."

"It does puzzle the deuce out of me," Keanua grunted. "He's a good swimmer, if he did go for a swim. Of course, he might have taken a walk instead, into the jungle. Are you sure the native tribes are always peaceful?"

"Um—"

"Can you hear me? Can you hear me?"

Ranu's voice was as tiny in Alisabeta's head as the scream of an insect. But they felt the pain that jagged in it. He had been wounded.

"Get out! Get away as fast as you can! I've seen—the thing itself—it's working! I swear it must be working. Pouring out power . . . some kind of chemosynthetic plant beyond—They saw me as I started back. Put a blowgun dart in my thigh. Alarms hooting everywhere. I think I can beat them to the entrance, though, get into the jungle—"

Keanua had leaped to his feet. The muscles moved like snakes under his skin. "Trying to escape with natives tracking you?" the Taititian snarled.

Ranu's signal strengthened as he came nearer the open air. "This place has radiophone contact with the town. Dhananda's undoubtedly being notified right now. Get clear, you two!"

"If . . . if we can," Alisabeta faltered. "But you—"

"GET UNDER WAY, I TELL YOU!"

v

Lorn stared from one to another of them. "What's wrong?" A hand dropped to his knife. Years at a desk had not much rusted his mountaineer's reflexes.

Alisabeta glanced past him at Keanua. There was no need for words. The Taititian's grasp closed on Lorn's dagger wrist.

"What the hell—!" The Merican yanked with skill. His arm snapped out between the thumb and fingers holding him, and a sunbeam flared off steel.

Keanua closed in. His left arm batted sideways to deflect the knife. His right hand, stiffly held, poked at the solar plexus. But Lorn's left palm came chopping down, edge on. A less burly wrist than Keanua's would have broken. As it was, the sailor choked on an oath and went pale around the nos-

trils. Lorn snatched his knife from the sheath and threw it out the porthole.

The Merican could then have ripped Keanua's belly. But instead he paused. "What's got into you?" he asked in a high, bewildered voice. "Miss Alisa—" He half looked around for her.

Keanua recovered enough to go after the clansman's dagger. One arm under the wrist for a fulcrum, the other arm applying the leverage of his whole body—Lorn's hand bent down, the fingers were pulled open by their own tendons, the blade tinkled to the deck. "Get it, girl!" Keanua said. He kicked it aside. Lorn had already grappled him.

Alisabeta slipped past their trampling legs to snatch the weapon. Her pulse thuttered sick in her throat. It was infinitely horrible that the sun should pour so brilliant through the porthole. The chuckle of water on the hull was lost in the harsh breath and stamp of feet, back and forth as the fight swayed. Lorn struck with a poleax fist, but Keanua dropped his head and took the blow on the skull. Anguish stabbed through the Merican's knuckles. He let go his opponent. Keanua followed the advantage, seeking a strangle hold. Lorn's foot lashed out, caught the Taititian in the stomach, sent him lurching away.

No time to stare! Alisabeta ran up the ladder, onto the deck. A

few black children stood on the wharf, sucking their thumbs and gazing endlessly at the ship. Except for them, the village seemed asleep. But no, there in the heat shimmer . . . dust on the downhill path. . . . She shaded her eyes. A man in white and three soldiers in green; headed this way, surely. Dhananda had been informed that a spy had entered the secret place. Now he was on his way to arrest the spy's indubitable accomplices.

But with only three men?

Wait! He doesn't know about head-to-head. He can't tell that we here know he knows about Ranu. So he'll plan to capture us by surprise—so we won't destroy evidence or blow up the vessel or something—yes, he'll come aboard with some story about searching for Ranu, and have his men aim their guns at us when he makes a signal. Not before.

"Ranu, what should I do?"

There was no answer, only—when she concentrated—a sense of pain in the muscles, shortness in the breath, heat and sweat and running. He fled through the jungle with the blowgun men on his trail, unable to think of anything but a hiding place.

Alisabeta bit her nails. Lesu Haristi, Son of Tanaroa, what to do, what to do? She had been about to call the advance base on Car Nicbar. A single radio shout, to tell them what had been

learned, and then surrender to Dhananda. But it was a desperation measure. Not only would it openly involve the Federation government, but any outsider who happened to be tuned to that band—and there was considerable radio talk these days—would tell the world what was here. And that would in time start similar kettles boiling elsewhere . . . and the Federation couldn't sit on that many lids, didn't want to, wasn't equipped to—*Stop this, you ninny! Make up your mind!*

Alisabeta darted back down into the engine room. Keanua and Lorn rolled on the deck, locked together. She picked a wrench from among the tools and poised it above the Merican's head. His scalp shone pinkly through the yellow hair, a bald spot, and last of his children. . . . No. She couldn't. She threw the wrench down, pulled off her lap-lap, folded it into a strip and drew it carefully around Lorn's throat. A twist; he choked and released Keanua; the Taitian got a grip and throttled him unconscious in thirty seconds.

"Thanks!" he wheezed. "Don't know . . . if I could have done that . . . alone. Strong's an orca, him." As he talked, Keanua was deftly binding and gagging the Merican. Lorn stirred, blinked, writhed helplessly and glared his hurt and anger.

Alisabeta had already slid the

panel aside. The compartment behind held the other engine, the one that was not damaged. She connected it to the gears while she told Keanua what she had seen. "If we work it right, I think we can also capture those other men," she said. "That'll cause confusion, and they'll be useful hostages, don't you think?"

"Right. Good girl." Keanua patted her bottom and grinned. Remembering Beneghali customs, she slipped the lap-lap back on and went topside.

Dhananda and his guards reached the dock a few minutes later. She waved at them but kept her place by the saloon cabin door. They crossed the gangplank, which boomed under their boots. The Brahmard's countenance was stormy. "Where are the others?" he demanded.

"In there." She nodded at the cabin. "Having a drink. Won't you join us?"

He hesitated. "If you will too, my lady."

"Surely." She went ahead. The room beyond was long, low, and cool, furnished with little more than straw mats and shoji screens. Keanua stepped from behind one of them. There was a repeating blowgun in his hands.

"Stay right where you are, friends," he ordered around the mouthpiece. "Raise your arms."

A soldier spat a curse and snatched for his submachine gun.

Keanua puffed. The feeder mechanism clicked. Three darts buried themselves in the deck at the soldier's feet. "Cyanide," Keanua reminded them. He kept the bamboo tube steady. "Next time I aim to kill."

"What do you think you are doing?" Dhananda whispered. His features had turned almost gray. But he lifted his hands with the rest. Alisabeta slipped over and disarmed them. She cast the guns into a corner as if they were hot to the touch.

"Secure them," Keanua said. He made the prisoners lie down one by one while the girl hogtied them. Then he carried each below, through a hatch in the saloon deck to a locker where Lorn already lay. As he made Dhananda fast to a shacklebolt, he said, "We're going to make a break for it. Would you like to tell your men ashore to let us go without a fight? I'll run a microphone down here for you."

"No," Dhananda said. "You pirate swine."

"Suit yourself. But if we get sunk, you'll drown too. Think about that. Keanua went back topside.

Alisabeta stood by the cabin door, straining into a silence that hissed. "I can't hear him at all," she said from the verge of tears. "Is he dead? I can't hear him!"

"No time for that now," Keanua said. "We've got to get started.

Take the wheel. I think once we're past the headland, we'll pick up a little wind."

She nodded dumbly and went to the pilot house. Keanua cast off. Several adult villagers materialized as if by sorcery to watch. The engine throbbed, screws caught the water, the *Aorangi* stood out into the bay. Keanua moved briskly about, preparing the ship's armament. It was standard for a civilian vessel: a catapult throwing bombs of jellied whale oil, two flywheel guns that cast streams of small sharp rocks. Since pirates couldn't get gunpowder, there was no reason for merchantmen to pay its staggering cost. One of the Intelligence officers had wanted to supply a rocket launcher, but Ranu had pointed out that it would be hard enough to conceal the extra engine.

Men must be swarming like ants on the hilltop. Alisabeta saw four of them come down on horseback. The dust smoked behind them. They flung open the doors of a boathouse and emerged in a motorcraft that zoomed within hailing distance.

A Beneghali officer rose in the sternsheets and bawled through a megaphone—his voice was lost on that sun-dazzled expanse of water—"Ahoy, there! Where are you bound?"

"Your chief's commandeered us to make a search," Keanua shouted back.

"Yes? Where is he? Let me speak to him."

"He's below. Can't come now."

"Stand by to be boarded."

Keanua said rude things. Alisabeta guided the ship out through the channel, scarcely hearing. Partly she was fighting down a sense of sadness and defilement—she had attacked guests—and partly she kept crying for Ranu to answer. Only the gulls made reply.

The boat darted back to shore. Keanua came aft. "They'll be upon us before long," he said bleakly. "I told 'em their own folk would go down with us, and they'd better negotiate instead. Implying we really are pirates, you know. But they wouldn't listen."

"Certainly not," Alisabeta said. "Every hour of haggling is time gained for us. They know that."

Keanua sighed. "Well, so it goes. I'll holler to Nicbar."

"What signal?" A few codes had been agreed upon: mere standardized impulses, covering pre-set situations. If a real message were sent in cipher, the Benghalis (or anyone else who intercepted it) could record it, break the cipher in time, and thus get too good an idea of what lay behind all this.

"Attack. Come here as fast they can with everything they've got," Keanua decided.

"Just to save our lives? Oh, no!"

The Taitian shook his head.

"To wipe out that damned project in the hills. Else the Brahmards will get the idea, and mount such a guard from now on that we won't be able to come near without a full-scale war."

He stood quiet a while. "Two of us on this ship, and a couple hundred of them," he said. "We'll have a tough time staying alive, girl, till the relief expedition gets close enough for a head-to-head." He yawned and stretched, trying to ease his tension. "Of course, I'd rather like to stay alive for my own sake too."

There was indeed a breeze on the open sea, which freshened slightly as the *Aorangi* moved south. They hoisted sail and disengaged the screws. The engine would have enough to do, powering the weapons. After lashing the wheel, Keanua and Alisabeta helped each other into quilted combat armor and alloy helmets.

The island began to fall behind. It burned with greenness against green and blue water. Alisabeta stared aft. "*Ranu, are you there? Are you alive? Oh, my dear—*"

Then the airships came aloft. That was the only possible form of onslaught, she knew. With their inland mentalities, the Brahmards had stationed no naval units here. There were—one, two, three—a full dozen vessels, big and bright in the sky. They assumed formation and lined out in pursuit.

VI

Ranu awoke so fast that for a moment he blinked about him in wonderment: where was he, what had happened? He lay in a hollow beneath a fallen tree, hidden by a cascade of trumpet flower vines. The sun turned their leaves nearly yellow; the light here behind them was thick and green, the air unspeakably hot. He couldn't be sure how much of the crawling over his body was sweat and how much was ants. His right thigh needled him where the dart had pierced it. A smell of earth and crushed leaves filled his nostrils, mingled with his own stench. Nothing but his pulse and the distant, irrational liquid notes of a bulbul interrupted noonday silence.

Oh, yes, he recalled wearily. I got out the main entrance. A dozen Beneghalis after me . . . shook them, but just plain had to outrun the natives . . . longer legs. I hope I covered my trail, once out of their sight. Must have, or they'd've found me here by now. I've been passed out for hours.

The ship!

Remembrance rammed into him. He sucked a breath between his teeth, nearly sprang from his hiding place, recovered his wits and dug fingers into the mould under his belly. After a minute he felt able to reach forth head-to-head.

"Alisabeta! Are you there? Can you hear me?"

Her answer was instant. Not words—a laugh, a gasp, a sob, clearer and stronger than he had ever known before; and then, as their minds embraced, some deeper aspect of self. Suddenly he became her, aboard the ship.

There was no more land to be seen, only the ocean, blue close at hand, shining like mica further out where the sun smote it. The wreckage of an aircraft bobbed about, a kilometer to starboard, gondola projecting from beneath the flat bag. The other vessels maneuvered majestically overhead. Their propeller whirr drifted across an empty deck.

The *Aorangi* had taken a beating. Incendiaries could not ignite fireproofed material, but had left scorches everywhere. The cabins were kindling wood. A direct hit with an explosive bomb had shattered the foremast, which lay in a tangle across the smashed sun-power collectors. The after boom trailed overside. What sails were still on the yards hung in rags. A near miss had opened two compartments in the port hull, so that the catamaran was low on that side, the deck crazily tilted.

Three dead men sprawled amidships in a black spatter of clotting blood. Ranu recollected with Alisabeta's horror: when an aircraft sank grapnels into the fore-skysail and soldiers came

swarming down ropes. She hosed them with stones. Most had dropped overboard, but those three hit with nauseating sounds. Then Keanua, at the catapult, put four separate fire-shells into the gasbag. Even with modern safety devices, that was enough to touch off the hydrogen. The aircraft cast loose and drifted slowly seaward. The pale flames were nearly invisible in the sunlight, but steam puffed high when it ditched. The Maurai, naturally, made no attempt to hinder the rescue operation that followed. Since then the Beneghalis had been bombing and strafing only. Once the defenders were out of action, they could board with no difficulty.

"They haven't been pressing the attack as hard as they might," Keanua reported. *"But then, they don't know we have reinforcements coming. If we can hold out that long—"* He sensed how intimate the rapport was between Ranu and the girl, and withdrew with an embarrassed apology. Still, Ranu had had time to share the pain of burns and a pellet in his shoulder.

Alisabeta crouched in the starboard slugthrower turret. It was hot and dark and vibrated with the whining flywheel. The piece of sky in her sights was fiery blue, a tatter of sail was blinding white. He felt her fear. Too many bomb splinters, too many concussion blows, had already smitten these

planks. An incendiary landing just outside would not kindle them, but would certainly pull out the oxygen. *"So, so,"* Ranu caressed her. *"I am here now."* Their hands swung the gun about.

The lead airship peeled off the formation and lumbered into view. For the most part the squadron had passed well above missile range and dropped bombs—using crude sights, luckily. But the last several passes had been strafing runs. Keanua thought that was because their explosives were nearly used up. The expenditure of unstable chemicals had been great, even for an industrialized power like Beneghal. Alisabeta believed the enemy were concerned for the prisoners, did not want to sink the *Aorangi* on that account, and having failed to disable her with small bombs were now trying other means.

No matter. Here they came!

The airship droned low above the gaunt A of the mainmast. Its shadow swooped before it. So did a pellet storm, rocks thumping, booming, skittering, the deck a-tremble under their impact. Alisabeta and Ranu got the enemy's forward gun turret, a thick wooden bulge on the gondola, in their sights. They pressed the pedal that engaged the feeding mechanism and squeezed trigger. Their weapon came to life with a howl. Rocks flew against the wickerwork above.

From the catapult emplacement, Keanua roared. Alisabeta heard him this far aft. A brief and frightful clatter drowned him out. The airship lurched. It fell off course, wobbled, veered, and drifted aside. The girl saw the port nacelle blackened and dented. Keanua had scored a direct hit on that engine, disabled it, crippled the ship.

"Hurrray!" Ranu whooped.

Alisabeta leaned her forehead on the gun console. She shivered with exhaustion. *"How long can we go on like this? Our magazines will soon be empty. Our sun cells are almost drained, and no way to recharge them. Don't let me faint, Ranu. Hold me, my dear—"*

"It can't be much longer. Modern military airships can do a hundred kilometers per hour. The base on Car Nicbar isn't more than four hundred kilometers away. Any moment."

This moment!

Again Keanua shouted. Alisabeta dared step out on deck for a clear view, gasped and leaned against the turret. The Beneghalis, at their greater altitude, had seen the menace well before now. That last assault on the Aorangi was made in desperation. They started marshalling themselves for battle.

Still distant, but rapidly swelling, came the fifteen lean golden-painted ships. Each had four spendthrift engines to drive it

through the sky; each was loaded with bombs and slugs and aerial harpoons. The Beneghalis had spent their ammunition on the Aorangi.

As the newcomers approached, Ranu made out their insignia. Not Maurai, of course; not anything, though the dragons looked rather Sinese. Rumor had long flown about a warlord in Yunnan who had accumulated enough force to attempt large-scale banditry. On the other hand, there were always upstart pirates from Buruma, Iryan, or even from as far as Smalilann—

"Get back under cover," Ranu warned Alisabeta. *"Anything can happen yet."* When she was safe, he sighed. *"Now my own job starts."*

"Ranu, no, you're hurt."

"They'll need a guide. Farewell for now. Tanaroa be with you . . . till I come back."

Gently, he disengaged himself. His thought flashed upward. *"Ranu Makintairu calling. Can you hear me?"*

"Loud and clear." Aruwera Samitu, chief Intelligence officer aboard the flagship, meshed minds and whistled. *"You've had a thin time of it, haven't you?"*

"Well, we've gotten off easier than we had any right to, considering how far the situation has progressed. Listen. Your data fitted into a picture which was perfectly correct, but three or four

years obsolete. The Brahmards are not just building an atomic power station here. They've built it. It's operating."

"What!"

"I swear it must be." Swiftly, Ranu sketched what he had seen. "It can't have been completed very long, or we'd be facing some real opposition. In fact, the research team is probably still busy getting a few final bugs out. But essentially, the job is complete. As your service deduced, the Beneghalis didn't quite have the scientific resources to do this themselves, on the basis of ancient data. I'd guess they got pretty far, but couldn't quite make the apparatus work. So they imported Lorn sunna Browen. And he, with his knowledge of nuclear processes in the stars, developed a fresh approach. I can't imagine what. But . . . they've done something on this island that the whole ancient world never achieved. Controlled hydrogen fusion."

"Is the plant very big?"

"Enormous. But the heart seems all to be in one room. A circular chamber lined with tall iron cores. I hardly dare guess how many tons of iron. They must have combed the world."

"They did. That was our first clue. Our own physicists think the reaction must be contained by magnetic fields—But no time for that. The air battle's beginning. I

expect we can clear away these chaps within an hour. Can you, then, guide us in?"

"Yes. After I've located myself. Good luck."

Ranu focused attention back on his immediate surroundings. Let's see, early afternoon, so that direction was west, and he'd escaped along an approximate southeasterly track. Setting his jaws against the pain in his leg, he crawled from the hollow and limped into the canebrakes.

His progress was slow, with many pauses to climb a tree and get the lay of the land. It seemed to him that was making enough noise to rouse Nan down in watery hell. More than an hour passed before he came on a man-made path, winding between solid walls of brush. Ruts bespoke wagons, which meant it ran from some native village to the caves. By now Ranu's chest was laboring too hard for him to exercise any forester's caution. He set off along the road.

The jungle remained hot and utterly quiet. He felt he could hear anyone else approaching in plenty of time to hide himself. But the Annamanese caught him unexpectedly.

They leaped from an overhead branch, two dark dwarfs in loin-cloths, armed with daggers and blowguns. Ranu hardly glimpsed them as they fell. He had no time to think, only to react. His left

hand chopped at a skinny neck. There was a cracking sound. The native dropped like a stone.

The other one squealed and scuttered aside. Ranu drew his knife. The blowgun rose. Ranu charged. He was dimly aware of the dart as it went past his ear. It wasn't poisoned—the Annamanese left that sort of thing to the civilized nations—but it could have reached his heart. He caught the tube and yanked it away. Fear-widened eyes bulged up at him. The savage pulled out his dagger and stabbed. He was not very skillful. Ranu parried the blow, taking only a minor slash on his forearm, and drove his own knife home. The native wailed. Ranu hit again.

Then there was nothing but sunlit thick silence and two bodies which looked even smaller than when they had lived. *Merciful Lesu, did I have to do this?*

Come on, Ranu. Pick up those feet of yours. He closed the staring eyes and continued on his way. When he was near the caverns, he found a hiding place and waited.

Not for long. Such Beneghali airships as did not go into the sea fled. They took a stand above Port Arberta, prepared to defend it against slavers. But the Maurai cruised on past, inland over the hills. Ranu resumed contact with Aruwera, who relayed instructions to the flagship navigation officer.

Presently the raiders circled above the power laboratory.

Soldiers—barbarically painted and clad—went down by parachute. The fight on the ground was bitter but short. When the last guard had run into the jungle, the Maurai swarmed through the installation.

In the cold fluorescent light that an infinitesimal fraction of its own output powered, Aruwera looked upon the fusion reactor with awe. "What a thing!" he kept breathing. "What a *thing!*"

"I hate to destroy it," said his chief scientific aide. "Tanaroa! I'll have bad dreams for the rest of my life. Can't we at least salvage the plans?"

"If we can find them in time to microphotograph," Aruwera said. "Otherwise they'll have to be burned as part of the general vandalism. Pirates wouldn't steal blueprints! We've got to wreck everything as if for the sake of the iron and whatever else looks commercially valuable . . . load the loot and be off before the whole Beneghali air force arrives from the mainland. And, yes, send a signal to dismantle the Car Nic-bar base. Let's get to work. Where's the main shutoff switch?"

The scientist began tracing circuits, swiftly and knowingly but with revulsion still in him. "How much did this cost?" he wondered. "How much of this country's wealth are we robbing?"

"Quite a bit," said Ranu. He spat. "I don't care so much about that, though. Maybe now they can tax their peasants less. What I do care about—" He broke off. Numerous Beneghalis and some Maurai had died today. The military professionals around him would not understand how the memory hurt, of two little black men lying dead in the jungle, hardly bigger than children.

VII

The eighth International Physical Society convention was held in Wellantoa. It was even more colorful than past ones, for several other nations (tribes, clans, alliances, societies, religions, anarchisms . . . whatever the more-or-less-political unit might be in a particular civilization) had now developed to the point of supporting physicists. Robes, drawers, breastplates, togas joined the accustomed sarongs and tunics and kilts. At night music on a dozen different scales wavered from upper-level windows. Those who belonged to poetically minded cultures struggled to translate each other's compositions, and often took the basic idea into their own repertory. On the professional side, there were a number of outstanding presentations, notably a Maurai computer which used artificial organic tissue and a Brasileau mathematician's gen-

eralized theory of turbulence processes.

Lorn sunna Browen was a conspicuous attendee. Not that many people asked him about his Thrilling Adventure With The Pirates. That had been years ago, after all, and he'd given short answers even then. "They kept us on some desert island or other till the ransom came, then they set us off near Port Arberta one night. We weren't mistreated. Mainly we were bored." Lorn's work on stellar evolution was more interesting.

However, the big balding man disappeared several times from the convention lodge. He spoke to odd characters down on the waterfront; money went from hand to hand; at last he got a message which brought a curiously grim chuckle from him. Promptly he went into the street and hailed a pedicab.

He got out at a house in the hills above the city. A superb view of groves and gardens sloped down to the harbor, thronged with masts under the afternoon sun. Few other homes were visible. Even in their largest town, the Sea People didn't like to be crowded. This dwelling was typical, whitewashed brick, red tile roof, riotous flowerbeds. A pennant on the flagpole, under the Cross and Stars, showed that a shipmaster lived here.

When he was home. But the

hired prowler had said Captain Makintairu was at sea just now. His wife had stayed ashore this trip, having two children in school and a third soon to be born. The Merican dismissed the cab and strode over the path to the door. He knocked.

The door opened. The woman hadn't changed much, he thought: fuller of body, a small patch of gray in her hair, but otherwise—He bowed. "Good day, my lady Alisabeta," he said.

"Oh!" Her mouth fell open. She swayed on her feet. He thought she was about to faint. The irony left him.

"I'm sorry," he exclaimed. He caught her hands. She leaned on him an instant. "I'm so sorry. I never meant—I mean—"

She took a long breath and straightened. Her laugh was shaky. "You surprised me for fair," she whispered. "Come in."

He followed her. The room beyond was sunny, quiet, book-lined. She offered him a chair. "W-w-would you like a glass of beer?" She bustled nervously about. "Or I can make some tea. If you'd rather. That is . . . tea. Coffee?"

"Beer is fine, thanks." His Maurai was fairly fluent; any scientist had to know that language. "How've you been?"

"V-very well. And you?"

"All right."

A stillness grew. He stared at his

knees, wishing he hadn't come. She put down two glasses of beer on a table beside him, took a chair opposite, and regarded him for a long while. When finally he looked up, he saw she had drawn on some reserve of steadiness deeper than his own. The color had returned to her face. She even smiled.

"I never expected you would find us, you know," she said.

"I wasn't sure I would myself," he mumbled. "Thought I'd try, though, as long as I was here. No harm in trying, I thought. Why didn't you change your name or your home base or something?"

"We considered it. But our mission had been so ultra-secret. And Makintairu is a common N'Zealanner name. We didn't plan to do anything but sink back into the obscurity of plain sailor folk. That's all we ever were, you know."

"I wasn't sure about that. I thought from the way you handled yourselves—I figured you for special operatives."

"Oh, heavens, no. Intelligence had decided the truth was less likely to come out if the advance agents were a bona fide merchant crew, that had never been involved in such work before and never would be again. We got some special training for the job, but not much, really."

"I guess the standard of the Sea People is just plain high, then," Lorn said. "Must come from gener-

ations of taking genetics into consideration when people want to have kids, eh? That'd never work in my culture, I'm afraid. Not the voluntary way you do it, anyhow. We're too damned possessive."

"But we could never do half the things you've accomplished," she said. "Desert reclamation, for instance. We simply couldn't organize that many people that efficiently for so long a time."

He drank half his beer and fumbled in his blouse pocket for a cigar. "Can you satisfy my curiosity on one point?" he asked. "These past years I've wondered and wondered about what happened. I can only figure your bunch must have been in direct contact with each other. Your operation was too well coordinated for anything else. And yet you weren't packing portable radios. Are you telepaths, or what?"

"Goodness, no!" She laughed, more relaxed each minute. "We did have portable radios. Ultraminia-turized sets, surgically implanted, using body heat for power. Hooked directly into the nervous system. It was rather like telepathy, I'll admit. I missed the sensation when the sets were removed afterward."

"Hm." Somewhat surer of his own self, he lit his cigar and squinted at her through the first smoke. "You're spilling your secrets mighty freely on such short notice, aren't you?"

"The transceivers aren't a secret

any longer. That's more my professional interest than yours, and you've been wrapped up in preparations for your convention, so I imagine you haven't heard. But the basic techniques were released last year, as if freshly invented. The psychologists are quite excited about it as a research and therapeutic tool."

"I see. And as for the fact my lab was not raided by pirates but by an official Federation party—" Lorn's mouth tightened under the mustache. "You're admitting that too, huh?"

"What else can I do, now you've found us? Kill you? There was far too much killing." Her hand stole across the table until it rested on his. The dark eyes softened; he saw a trace of tears. "Lorn," she murmured, "I'm so sorry. We hated every minute."

"I suppose." He sat quiet, looked at his cigar end, drew heavily on the smoke and looked back at her. "I was nearly as bitter as Dhananda at first . . . bitter as the whole Brahmar caste. The biggest work of my life, gone. Not even enough notes left to reconstruct the plans. Even if we'd saved the blueprints, there'd have been no possibility of rebuilding. Beneghal's treasury was exhausted. People were starving on the mainland, close to revolt in some districts, this had been so expensive, and nothing ever announced to show for their taxes. Did you stop to think of that?

That you were robbing Beneghali peasants?"

"Often," she said. "Though remember, the tax collectors had skinned them first. The cost of that reactor project would have bought them a great deal of happiness and advancement. As witness the past several years, after the Brahmards buckled down to attaining more modest goals."

"But the reactor was working! Unlimited energy. In ten years' time, Beneghal could've been overflowing with every industrial material. The project would have paid off a thousand times over. And then you smashed it!"

Lorn sank back in his chair. Slowly, his fist unclenched. "We could never prove the job had not been done by pirates," he said without tone. "Certainly Beneghal couldn't declare war on the mighty Maurai Federation without proof enough to bring in a lot of indignant allies. Especially when your government offered such a whopping big help to relieve the famines. . . . But we could suspect. We could feel morally certain. And angry. God, how angry!"

"Until—" He sighed. "I don't know. When I came home and got back into the swing of my own work . . . and bit by bit re-realized what a decent, helpful, ungreedy bunch your people always have been . . . I finally decided you must've had some reason that seemed good to you. I couldn't un-

derstand what, but . . . oh, I don't know. Reckon I have to take some things on faith, or life would get too empty. Don't worry, Alisabeta. I'm not going to make any big public revelation. Wouldn't do any good anyway. Too much water's gone under that particular bridge. Your government might be embarrassed, but no one would care enough to make real trouble. Probably most people would think I was lying. So I'll keep my mouth shut." He raised blue eyes that looked like a child's, a child who has been struck without knowing what the offense was. "But could you tell me why? What you were scared of?"

"Surely," said Alisabeta. She leaned farther across the table, smiled with much gentleness and stroked his cheek, just once. "Poor well-meaning man!"

"There's no secret about our motives. The only secret is that we did take action. Our arguments were known for decades—ever since the theoretical possibility of controlled hydrogen fusion began to be seriously discussed. That's why the Brahmards were so furtive about their project. They knew we'd put pressure on to stop them."

"Yes, Dhananda always said you were jealous. Afraid you'd lose your position as the world's top power."

"Well, frankly, that's part of it. By and large, we like the way things are going. We want to stay

able to protect what we like. We weren't afraid Beneghal would embark on a career of world conquest or any such stupid thing. But given atomic energy, they could manufacture so much war matériel as to be invincible—explosives, power vehicles, jetplanes, even a few nuclear weapons. Once they presented us with a *fait accompli* like that, there'd be nothing we could do about events. Beneghal would take the lead. Our protests could be ignored; eventually, no one anywhere would listen to us. We could only regain leadership by embarking on a similar program. And the War of Judgment proved where a race like that would end!"

"M-m-m . . . yes—"

"Even if we refrained from trying for an atomic capability, others would not. You understand that's why the Brahmards never have told the world what they were doing; they see as well as us the scramble to duplicate their feat that would immediately follow.

"But there's a subtle and important reason why Beneghal in particular shouldn't be allowed to dominate the scene. The Brahmards are missionaries at heart. They think the entire planet should be converted to their own industrial-urban ideal. Whereas we believe—and we have a good deal of psychodynamic science to back us—we believe the many different cultures that grew up in isolation

during the dark ages should continue their own evolution. Think, Lorn. The most brilliant eras of history were always when alien societies came into reasonably friendly contact. When Egypt and Crete met in the Eighteenth Dynasty; Phoenician, Persian, Greek in classical times; Japan and China in the Nara period; Byzantium, Asia, and Europe crossbreeding to make the Renaissance—and, yes, our own era right now!

"Oh, surely, the Brahmard approach has much to offer. We don't want to suppress it. Neither do we want it to take over the planet. But given the power and productivity, the speed and volume of traffic, the resource consumption, the population explosion . . . given everything that your project would have brought about . . . the machine culture *would* absorb the whole human race again. As it did before the Judgment. Not by conquest, but by being so much more powerful materially that everyone would have to imitate it or go under."

Breathless, Alisabeta reached for her glass. Lorn rubbed his chin. "M-m-m . . . maybe," he said. "If industrialism can feed and clothe people better, though, doesn't it deserve to win out?"

"Who says it can?" she argued. "It can feed and clothe more people, yes. But are sheer numbers any measure of quality, Lorn? Don't you want to leave some

places on Earth where a man can go to be alone?

"And then, suppose industrialism did begin to spread. Think of the transition period. I told you once about the horrors that are a matter of historical record, when the ancient Communists set out to Westernize their countries overnight. That would happen again. Not that the Brahmarids would do it; they're good men. But other leaders elsewhere—half barbarians, childishly anxious for power and prestige, breaking their own cultures to bits in their impatience—such leaders would arise.

"Of course it's wrong that people go poor and hungry. But there's more than one solution to that problem. Each civilization can work out its own. We do it in the Islands by exploiting the seas and limiting our population. You do it in Merica by dry farming and continental trade. The Okkaidans do it by making moderation into a way of life. The Sber-yaks are working out a fascinating system of reindeer ranches. And on and on. And how much we learn from each other!"

"Even from Beneghal," Lorn said dryly.

"Yes," she nodded, quite grave. "Machine techniques in particular. Although . . . well, let them follow their own path, but no one in the Island envies them. I really don't think their way—the old way—is anything like the best.

Man isn't made for it. If industrialism was so satisfying, why did the industrial world commit suicide?"

"I suppose that's another reason you're afraid of atomic energy," he said. "Atomic war."

She shook her head. "We aren't afraid. We could develop the technology ourselves and keep anyone else from doing so. But we don't want that tight a control on the world. We think Maurai interference should be kept to an absolute minimum."

"Nevertheless," he said sharply, "you do interfere."

"Yes," she agreed. "That's another lesson we've gotten from history. The ancients could have saved themselves if they had had the courage—been hard-hearted enough—to act before things snowballed. If the democracies had suppressed every aggressive dictatorship in its infancy; or if they had simply enforced their idea of an armed world government at the time when they had the strength to do so—Well." She looked down. Her hand left his and went slowly across her abdomen; a redness crept into her cheeks. "No," she said, "I'm sorry people got hurt, that day at Annaman, but I'm not sorry about the end result. I always planned to have children, you see."

Lorn stirred. His cigar had gone out. He relit it. The first puff was as acrid as expected. Sunlight

slanted in the windows to glow on the wooden floor, on a batik rug from Smatra and a statuette of strangely disturbing beauty from somewhere in Africa.

"Well," he said, "I told you I don't hold any more grudges. I guess you don't figure to keep atomic energy down forever."

"Oh, no. Someday, in spite of everything we do, Earth will have grown unified and dull. Then it will again be time to try for the stars."

"So I've heard various of your thinkers claim. Me, though . . . philosophically, I don't like your attitude. I'm resigned to it, sure. Can't have every wish granted in

this life. I did get the fun of working on that project, at least. But damn it, Alisabeta, I think you're wrong. If your own society can't handle something big and new like the tamed atom, why, by Ok-tai, you've proven your society isn't worth preserving."

He felt instantly sorry and started to apologize: no offense meant, just a difference of viewpoint and— But she gave him no chance to say the words. She raised her head, met his gaze, and smiled like a cat.

"Our society can't handle something new?" she murmured. "Oh, my dear Lorn, what do you think we were doing that day?"

TO THE STARS

The children will go to the stars.
It's no use laughing;
It's no use weeping;
The boys are halfway there already.

We give them flesh
And ABC
And two-plus-two,
And set them free,
Not to lose them entirely,

And in the quiet of the night
We look out the window and watch
The planets circling like wolves.

—JAMES SPENCER

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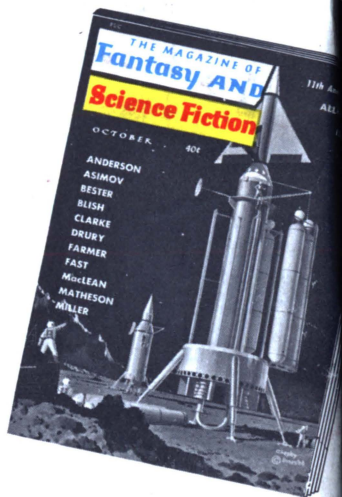
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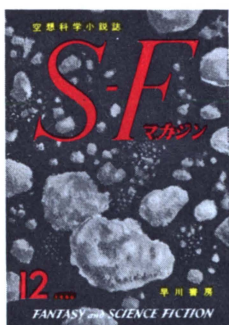
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